

Journal of the Royal Society of Arts

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FORTHCOMING MEETINGS

WEDNESDAY, 27TH APRIL, at 2.30 p.m. PETER LE NEVE FOSTER LECTURE. *'The Writing of Daniel Defoe'*, by Bonamy Dobrée, O.B.E., M.A., Emeritus Professor of English Literature, University of Leeds. John Robert Moore, A.M., Ph.D., Professor of English, University of Indiana, in the Chair.

WEDNESDAY, 4TH MAY, at 2.30 p.m. *'Future Developments of the Internal System of Transport'*, by D. L. Munby, M.A., Reader in Economics and Organization of Transport, University of Oxford. Major-General G. N. Russell, C.B., C.B.E., M.Inst.T., Member of British Transport Commission, and Chairman, Eastern Area Board, in the Chair.

MONDAY, 9TH MAY, at 6 p.m. The first of three CANTOR LECTURES on 'Energy', entitled *'The Generation of Power'*, by J. M. Kay, M.A., Ph.D., M.I.Mech.E. Professor of Nuclear Power, Imperial College of Science and Technology.

TUESDAY, 10TH MAY. *The Commonwealth Section meeting previously announced for this date will now be held on 17th May: see below.*

WEDNESDAY, 11TH MAY, at 2.30 p.m. *'The Shipping Industry To-day and Tomorrow'*, by Sir Robert Ropner, Past-President, Chamber of Shipping of the United Kingdom.

MONDAY, 16TH MAY, at 6 p.m. The second of the three CANTOR LECTURES on 'Energy', entitled *'The Power System'*, by F. H. S. Brown, C.B.E., B.Sc., M.I.Mech.E., M.I.E.E., Deputy Chairman, Central Electricity Generating Board. The lecture will be illustrated by lantern slides.

Tuesday, 17th May, at 5.15 p.m. COMMONWEALTH SECTION. SIR GEORGE BIRDWOOD MEMORIAL LECTURE. *'The Pathans'*, by Sir Olaf Caroe, K.C.S.I., K.C.I.E. His Excellency the High Commissioner for Pakistan in the Chair. (The lecture will be illustrated by lantern slides. Tea will be served in the Library from 4.30 p.m.)

MONDAY, 23RD MAY, at 6 p.m. The last of three CANTOR LECTURES on 'Energy', entitled *'The Retail Distribution of Electricity'*, by C. Robertson King, C.B.E., Chairman, The Electricity Council.

WEDNESDAY, 25TH MAY, at 2.30 p.m. *'The Problems and Prospects of Air Transport'*, by Peter G. Masefield, M.A., F.R.Ae.S., President, Royal Aeronautical Society. Sir George Edwards, C.B.E., Managing Director of

Vickers-Armstrong (Aircraft) Ltd., and a Vice-President of the Society, in the Chair.

THURSDAY, 26TH MAY, at 5.15 p.m. COMMONWEALTH SECTION. HENRY MORLEY LECTURE. '*Recent Developments in Fiji*', by Sir Alan Burns, G.C.M.G. The Right Honble. the Earl of Perth, P.C., Minister of State for Colonial Affairs, in the Chair. (The lecture will be illustrated by lantern slides. Tea will be served in the Library from 4.30 p.m.)

WEDNESDAY, 1ST JUNE, at 2.30 p.m. ALFRED BOSSOM LECTURE. '*The Preservation of Urban England*', by the Honble. Lionel Brett, M.A., F.R.I.B.A. The Right Honble. Lord Bossom, LL.D., F.R.I.B.A., J.P., a Vice-President of the Society, in the Chair.

Fellows are entitled to attend any of the Society's meetings without tickets (except where otherwise stated), and may also bring two guests. When they cannot accompany their guests, Fellows may give them special passes, books of which can be obtained on application to the Secretary. Official representatives of Companies in association with the Society may also attend with one guest.

THOMAS GRAY MEMORIAL TRUST

PRIZE FOR A DEED OF PROFESSIONAL MERIT

In recognition of the remarkable skill which is so constantly displayed at sea, the Council of the Royal Society of Arts, which administers the Thomas Gray Memorial Trust, offers again this year the Society's Silver Medal for a deed of outstanding professional merit by a member of the British Merchant Navy. The period to be covered by the offer will be the year ending 30th September, 1960, and deeds of a character worthy to be considered for the award may be brought to the notice of the Council by any person not later than 31st December, 1960. They will not, however, be considered by the judges unless they have been endorsed by a recognized authority or responsible person able to testify to the deed to be adjudged.

The Council reserves the right to withhold the above award at its discretion.

The Silver Medal for 1959 has, on the recommendation of the Trust Committee, been awarded to Captain R. J. Ryder, Master of the M.S. *Shell Roadbuilder*, for his part in the following operation at sea:

At 1345 hours on 1st April, 1959, M.S. *Widdale H* left Swansea, bound for Worcester, with a cargo of about 341 tons of motor spirit. At the time visibility was fairly good, but after passing the Spoil Buoy in Swansea Bay, it deteriorated to patchy fog of varying densities. Whilst she was nearing Nash Point, *Widdale H* ran aground, and although her engines were immediately put full speed astern she remained fast aground. Soon afterwards *Regent Jane* arrived in the vicinity and offered to stand by and give assistance on the following flood tide.

At about 1715 hours M.S. *Shell Roadbuilder*, in command of Captain Ryder and bound from Sharpness to Swansea in ballast, entered the Nash Passage in dense fog, passing close to the anchored *Regent Jane* which was standing by. By means of radio-telephone it became known that *Widdale H* was aground close inshore, and that the Master of *Regent Jane* considered that owing to his draught he would have difficulty in approaching the distressed vessel. Accordingly *Shell Roadbuilder* was immediately turned to stand by the casualty.

It was then low water and visibility was very poor. Whilst waiting for the flood *Shell Roadbuilder's* crew prepared towing tackle from such gear as was available on board.

Radio-telephone contact was established with *Widdale H*, and her Master was informed that an attempt would be made to put a line aboard his vessel aft. Rocket line-throwing apparatus could not be used, since *Widdale H* was laden with a cargo of spirit.

The first attempt was made in darkness with a strong flood tide running to the North, and tending to take *Shell Roadbuilder* inshore and away from *Widdale H*. By this time it was seen that the sea was breaking all round *Widdale H* and that she was lifting and pounding the bottom. This first effort failed. With courage and persistence Captain Ryder ran his vessel down on the casualty no less than seven times. On four occasions he succeeded in getting a line aboard and secured, but at each attempt to tow her clear the line parted under strain of the heavy sea breaking round both vessels.

Eventually *Shell Roadbuilder's* tackle was completely destroyed and she borrowed a rope from *Regent Jane*, which was still standing by. The last attempt to tow off *Widdale H* was made in complete darkness and in a heavy breaking sea. *Shell Roadbuilder* ran in close and, when she was about 20 feet from *Widdale H*, dropped into a deep trough; the following sea hit her on the stern, with the result that she broached to and her stern came into contact with *Widdale H*. The cliff face was only between twenty and thirty feet ahead. With great difficulty the towline was made fast, but because the rough seas caused *Shell Roadbuilder* to pitch heavily, the bollards were pulled from her deck.

Captain Ryder continued to stand by, keeping radio contact with *Widdale H*, *Regent Jane* and other vessels. He also notified the coastguards and Ilfracombe radio, and instructed *Widdale H* to listen on the distress frequency, as the Mumbles lifeboat was putting out to her assistance.

Captain Ryder finally launched an inflatable life-raft but was unable to drift it near enough to the stranded vessel. Petrol fumes from *Widdale H* were now becoming overpowering, and *Shell Roadbuilder* was forced to leave the immediate vicinity to stand by just outside the East Nash Buoy.

In all, Captain Ryder stood by for eleven hours. The crew of *Widdale H* eventually waded ashore at low tide, but the vessel itself became a complete wreck.

EXHIBITION OF BURSARY DESIGNS

The exhibition of winning and commended designs in the 1959 Industrial Art Bursaries Competition will be held in the Society's exhibition rooms (*which are reached from 18 Adam Street*) from Tuesday, 17th May until Friday, 3rd June. As announced in the last issue of the *Journal*, special cards of admission are required for the opening at 12 noon on 17th May. Thereafter the hours of viewing are as follows: Mondays to Fridays, from 10 a.m. to 5.30 p.m.; Saturdays, from 10 a.m. to 12.30 p.m.

NEW HONORARY CORRESPONDING MEMBERS OF THE SOCIETY

The Council has appointed the following to be Honorary Corresponding Members of the Society:

Victoria, Australia: L. J. Hartnett, C.B.E., Rubra, Watts Parade, Mount Eliza, Victoria.

Saskatchewan, Canada: Professor Louis B. Jaques, M.A., Ph.D., F.R.S.C.,
682 University Drive, Saskatoon, Sask.

MEETING OF COUNCIL

A meeting of Council was held on Monday, 11th April. Present: Mr. Oswald P. Milne (in the Chair); Mrs. Mary Adams; Sir Hilary Blood; the Honble. G. C. H. Chubb; Mr. R. E. Dangerfield; Mr. Peter Le Neve Foster; Mr. Geoffrey de Freitas; Mr. John Gloag; Sir Ernest Goodale; Dr. Stanley Gooding; Mr. Milner Gray; Lord Latham; Mr. Edgar E. Lawley; Mr. F. A. Mercer; Lord Nathan; Mr. Paul Reilly; Mr. G. E. Tonge; Mr. C. M. Vignoles; Mr. Hugh A. Warren; Sir Griffith Williams and Miss Anna Zinkeisen; with Dr. K. W. Luckhurst (Secretary), Mr. G. E. Mercer (Deputy Secretary), and Mr. J. S. Skidmore (Assistant Secretary).

ELECTIONS

The following Fellows of the Society were appointed Benjamin Franklin Fellows:

Armstrong, Colonel Francis Tuttle.
Batt, William L., C.M.G., M.E., D.Eng., Sc.D.
Conant, Dr. Kenneth John.
Drinker, Henry S., LL.B., Mus. Doc., Litt.D.
Frazier, John Earl, B.S., Sc.D.
Gosnell, Charles Francis, A.B., M.S., Ph.D.
Heller, Robert.
Kahn, Ely Jacques, A.B., B.Arch.
Loewy, Raymond, Hon.R.D.I.
McCollum, Professor Elmer Verner, M.A., Ph.D., D.Sc., LL.D.
Munro, Professor Thomas, A.M., Ph.D.
Sloan, Alfred Pritchard, Jr.
Sweeney, James Johnson, A.B.
Teague, Walter Dorwin, Hon.R.D.I.

The following candidates were duly elected Fellows of the Society (those whose names are marked with an asterisk were elected Benjamin Franklin Fellows):

- *Aldrich, Winthrop Williams, G.B.E., New York, N.Y., U.S.A.
- Alexander, Henry James William, Brighton, Sussex.
- *Bernstein, Leonard, New York, N.Y., U.S.A.
- Blishen, Bernard Russell, M.A., Vancouver, B.C., Canada.
- Bolton, Miss Sheila Dorothy, B.A., Reading, Berks.
- Boynton, Mrs. Hilary Enid, A.R.C.A., Hull, Yorks.
- Broughton, Brian John, A.R.I.B.A., London.
- *Burt, Samuel M., Washington, D.C., U.S.A.
- Charles, Major Ivor, LL.B., A.C.I.S., London.
- Cleminson, Henry Millican, Southwold, Suffolk.
- *Chernoble, Samuel F., New York, N.Y., U.S.A.
- Colkett, Leonard, Harrow, Middx.
- *Copland, Aaron, Ossining, N.Y., U.S.A.
- Crowe, Stanley Frederick, A.M.I.Mech.E., Gidea Park, Essex.
- *de Forest, Lee, Hollywood, California, U.S.A.
- *De Seversky, Alexander P., New York, N.Y., U.S.A.

- Downing, Owen Henry, Bromley, Kent.
- *Dryden, Hugh Latimer, A.M., Ph.D., Washington, D.C., U.S.A.
- Edwards, Patrick Reginald George, Corio, Victoria, Australia.
- *Eichenberg, Professor Fritz, Brooklyn, N.Y., U.S.A.
- Fairs, Geoffrey Lowrie, M.A., Liverpool.
- Farook, Mohammed, Trinidad, West Indies.
- Farrell, Francis Charles, Widnes, Lancs.
- Francis, Reginald James, East Grinstead, Sussex.
- Fuller, Henry James Daniel, Margate, Kent.
- Fuller, Peter Henry, Margate, Kent.
- Hall, Eric Blair, Hounslow, Middx.
- Hampton-Morris, B., Hayes, Middx.
- *Harold, Raymond P., Worcester, Mass., U.S.A.
- Hilton, Alan Preston, Ringmore, Devon.
- Holden, Arthur Colin, Blackheath, Staffs.
- Joss, Frederick, London.
- Kennedy, Frank, High Wycombe, Bucks.
- *Kinzel, Augustus Braun, New York, N.Y., U.S.A.
- Lacome, Myer, Otley, Yorks.
- Lane, Norman Mitchell, Horsham, Sussex.
- Lingstrom, Miss Freda Violet, O.B.E., Westerham, Kent.
- Lowndes, Sydney Charles, Chaddesden, Derby.
- *Mead, Professor Margaret, New York, N.Y., U.S.A.
- Mendes, Miss Marion de Sola, New York, N.Y., U.S.A.
- *Messersmith, Robert S., Westfield, New Jersey, U.S.A.
- *Mestrovic, Professor Ivan, South Bend, Ind., U.S.A.
- *Mitchell, Clifford Robert, Kansas City, Missouri, U.S.A.
- Newing, Peter, F.S.A.Scot., Bletchley, Bucks.
- Norfield, Edgar George, Edenbridge, Kent.
- Pathak, Karunamoy, Calcutta, India.
- *Prizer, John Butler, Philadelphia, Pa., U.S.A.
- Purdie, Thomas, D.A., Greenock, Scotland.
- Rock, Miss Isabella Easton, Ballymena, Co. Antrim, N. Ireland.
- *Schramm, James Siegmund, Burlington, Iowa, U.S.A.
- Sharp, William Henry, Redhill, Surrey.
- *Sikorsky, Igor Ivanovitch, Stratford, Conn. U.S.A.
- Simonian, Anoushavan J., B.Com., Beirut, Lebanon.
- Sparrow, Alfred, A.T.D., Manchester.
- Stein, Mendel, B.Sc., Ph.D., Kegworth, Derby.
- Stonham, Frederick Henry, A.T.D., Newbury, Berks.
- Teale, Percival Leslie, Jamestown, St. Helena, South Atlantic.
- Thompson, Bertram Albert, London.
- Thompson, Miss Joyce Wansey, London.
- *Tommasini, Amadeo R., Berkeley, California, U.S.A.
- Unwin, Robert William, London.
- *Walker, John, Washington, D.C., U.S.A.
- Weimer, Charles Perry, Morris Plains, New Jersey, U.S.A.
- Wenger, John, New York, N.Y., U.S.A.
- Williams, Kempton Vernon, Wokingham, Berks.
- Wright, Stanley Gordon, Burnley, Lancs.

The following candidates were duly elected Associate Members of the Society as Industrial Art Bursaries winners in 1959:

- Allanson, Norman Stuart, London.
- Croot, Miss Peggy Ann, Barnstaple, Devon.

Drysdale, John Stewart, Whitley Bay, Northumberland.
Lewis, David Whitfield, London.
Lovett, David Laurie, Sutton, Surrey.
Patterson, John Houghton, Newcastle-on-Tyne.
Payne, Martin Leslie, Aylesbury, Bucks.
Payze, Miss Barbara Grace, London.
Taylor, Miss Rosalie Elizabeth, Harlow, Essex.
Willis, John, Newcastle-on-Tyne.

The following Companies were admitted into association with the Society:

The Cementation Company Ltd., London.
The Rank Organisation Ltd., London.
Tube Investments Ltd., Birmingham.

HONORARY CORRESPONDING MEMBERS

Approval was given to the appointment of two new Honorary Corresponding Members of the Society, in Victoria, Australia, and Saskatchewan, Canada, respectively. (See separate Notice on p. 387.)

The news of the death of Mr. Bradford Williams, the Honorary Corresponding Member in Boston, U.S.A., was received with regret. (See obituary notice on p. 467.) It was also reported that Mr. A. M. Maddox, the Honorary Corresponding Member in Calcutta, had resigned this appointment upon returning to the United Kingdom.

CHRISTMAS CARD, 1960

Consideration was given to the design of the Society's Christmas Card for 1960.

ANNUAL GENERAL MEETING

It was decided that the Annual General Meeting should be held on Wednesday, 29th June, 1960, at 3 p.m.

THE SIR JOHN SOANE MUSEUM

Mr. John Gloag was appointed as the Society's representative on the Board of Trustees of the Sir John Soane Museum, in succession to Sir Albert Richardson.

EXAMINATIONS DEPARTMENT ACCOMMODATION

Proposals for providing additional accommodation for the Examinations Department were considered.

THOMAS GRAY MEMORIAL TRUST

The report of the responsible committee on the activities of the Thomas Gray Memorial Trust was received, and its proposals for 1961 were approved.

OTHER BUSINESS

A quantity of financial and other business was transacted.

THE TRAINING OF STAFF FOR FOREIGN POSTS: A DUTCH EXPERIMENT

A paper by

E. B. J. POSTMA,

*Rector, Netherlands College for Representation Overseas
(N.O.I.B.), read to the Society on Wednesday,
13th January, 1960, with A. R. N. Roberts, of Imperial
Chemical Industries Ltd., and a Member of Council of
the Society, in the Chair*

THE CHAIRMAN: I am sure that everyone present will join with me in giving a welcome to our distinguished visitor. He comes from a country with which we have long ties of friendship which were strengthened by our common struggle in the Second World War. Dr. Postma, indeed, played no unimportant part in the resistance movement in Holland, and in the unhappy event of a rebirth of Nazism I think that he will be the last man in the world to be converted.

Dr. Postma's subject to-day is not only one of great interest to us as another great trading community, but it has an additional significance. It is the first expression of the wish of the Council of this Society to have annually a lecturer from the Continent as a mark not only of the essential commercial link between Great Britain and Western Europe, but also one of recognition of our common heritage in cultural things. So we may hail Dr. Postma this afternoon both as a specialist at whose feet we can all sit with advantage, and also as the forerunner of other speakers from European countries whom we hope to hear in years to come. I myself welcome him also for personal reasons. No one can visit his training college at Nijenrode (which we are to hear about) without a feeling of deep admiration for the man whose personality pervades all the activities of that lively and creative organization; and additionally, my wife and I, and our daughter, also recall that we have enjoyed the delightful hospitality of his home. I hope that to-day he feels at home with us. Certainly he may be sure that we have brought to this meeting warm hearts and attentive ears.

The following paper was then read.

THE PAPER

At this moment I feel rather like a boy who has to propose the toast at his grandfather's birthday dinner; or, if you do not find that example fitting, like a student facing his professor in a *viva voce* examination. For this afternoon I have to tell you here in England something about the training and instruction that we give in our commercial college. Yet it is England that has given us many of the ideas that have enabled us to build up and organize our college. Still, I do not suppose that you have invited me here merely in order to check whether

we have learnt our lessons well. I am more inclined to look on this exchange of ideas and opinions as a modest symbol of the ever-increasing co-operation and interdependence of the Western world in general, and of our two countries in particular.

INTERNATIONAL CO-OPERATION

It is true that we have been drawing closer together for some centuries; but the tempo has greatly increased since the Second World War. Fortunately this has not only happened in the negative sphere of defence, but also in a more positive sense, for there is talk of exchanges, of yet stronger co-operation, of integration in the realms of economics and training and education. In any case, there is now movement and ferment on all sides. We no longer feel self-sufficient. We all want to know what our neighbours are doing.

Higher education is a good case in point. At one time the English and continental conceptions were widely different. For reasons that I need not go into now, our university courses have always been rather long, somewhere between five and seven years being quite normal. By contrast, yours seem short, since they last for only three or four years. Before 1940 our two systems existed side by side without influencing each other very much. But since 1945 we have each been taking a look at the other's educational system.

It is not merely feelings of fellowship and brotherly love that have prompted us to do so. Purely practical considerations apart, we have been actuated by the anxiety, the uncertainty and the fear that are rife in the modern world. As a result of the horrifying events of the last twenty-five years, many old values have been undermined. The old communities of church and family have disintegrated. Our university life has become debased. There is a crisis in authority, in belief and in ideas, which can be seen in the lack of ideals of our young people.

In this context Schelsky speaks of 'the sceptical generation'.¹ The Western world is full of aimless young people, rowdy and violent or else disinterested. The Netherlands has its *nozems*, Germany its *Halbstarken*, France its *blousins noirs*, America its 'beatniks', Britain its 'teddy boys'—and we all have our angry young men. They do not accept social order; they refuse to adapt themselves to the community; and they will not observe conventions and rules devised for the general good. They pose a problem whose solution is of extreme concern to us all, for we can draw but cold comfort from the news that the Russians with their *stijlgi* suffer from the same social malaise as we do.

ENGLISH AND AMERICAN INFLUENCES

Consequently, we have all had to put our heads together and pick each other's brains in an attempt to solve our common social problem. One result has been that we in the Netherlands have been gradually accepting English traditions—or at least the best of them. The process has been hastened by the fact that many Dutchmen spent the war in England, and so came in closer contact with English educational methods than they had done before. This contact led us to overhaul many of our ideas, our one-time Minister of Education, Dr. G. Bolkestein,

being one of our leaders of reform. Furthermore, many English and American professors and schoolmasters have visited our country since 1945. One of them, Professor Perry Miller, an American guest-lecturer at Leiden, wrote a bitter attack on our university system in *The Atlantic Monthly*.³ The title of his article was 'What Drove Me Crazy in Europe'.

Naturally the immediate reaction in Dutch university circles was intense indignation. But it was gradually realized that we had to accept new ways. The ideals upon which our university life had been founded were crumbling; new groups were streaming into the universities; the student-teacher ratio grew less favourable; the average age of graduating students was about 28; the results were too low. Formerly an important part of our students' education came through their membership of the student union; but now, after the war, less than half of them belong to any organization. I hope I have said enough to show you why we have slowly but surely come to the point when we shall have some shorter university courses leading to baccalaureate degrees. We are attaching more and more value to the ideas of communal living, of intensive participation in sports and—if I may use an Americanism—of campus life. All this has now come to a head with the recent publication of a plan to found a new university along these lines.

The founding of the N.O.I.B. has also played a modest part in focusing attention upon ideas of this sort and various other innovations. Our college was founded in 1946 by Dr. Bolkestein, to whom I have already referred, and a number of prominent businessmen, among them the late Dr. Albert Plesman, founder of K.L.M., and Mr. P. F. S. Otten, the President of Philips. They did not intend to start an enormous revolution in higher education; they merely wanted to found a college where young men could be trained and developed for business—particularly for export departments. They thought that this could best be done by following the Anglo-Saxon example, suitably adapted for Dutch circumstances and needs.

The training given in our college is dependent upon many factors. Of these, the chief are the residential system, the students' fraternity, the tutors and the subjects that they teach (with a special emphasis upon sport), the excursions, the practical working period and the religious and cultural activities.

CHARACTER TRAINING

The Residential System

For its value in character training, the residential or campus system, which demands that people should learn to live together in a community, must take pride of place. We are indebted to England for this system, and, indeed, the residential life of our college is in English hands. This is not only on account of English experience in this field, but also so that our students may have a chance of learning English, which is the most widely spoken commercial language, in a natural manner.

What makes a residential college valuable, in my opinion, is the fact that it teaches students to get on with each other. There are endless opportunities for

the exchange of opinions, for the mutual knocking off of rough corners and for learning how to be adaptable and resilient. None of this is news to you in England; but in the Netherlands these ideas are novelties. And certainly our country, more than any other, needs a common meeting-ground for young men of different religious beliefs, social milieux and regional backgrounds. I mention religious differences first, for, in our country, we divide everything possible—especially education—into three parts for the benefit of our three pillars of society: the Protestants, the Roman Catholics and the so-called Humanists. Thus every school is either proudly Protestant, Roman Catholic or non-denominational. As well as our National Universities, we have our Protestant and Roman Catholic foundations for higher education. This division exists for historical reasons, and in many ways it is valuable. But the business world is highly international, and consequently interdenominational. It is therefore vital that commercial students should learn how to mix with people of other persuasions. The extraordinary—and exciting—thing about our college is not that we have 250 people of some ten or fifteen denominations living together, but that they do so in what, for the Netherlands, is unusual harmony.

Site and Size

I mentioned a total of 250. In fact, we have room for between 250 and 270 students. We frequently ask ourselves whether we ought to expand. My own view is that we should lose the personal touch and the two-way traffic of ideas between tutors and students, if we were to increase beyond 300.

If a college is to have a life of its own, then I think that it ought to be situated in the country rather than in the town. A town is too distracting, making it harder for a college to develop its own character. We have been very lucky, for in 1946 the college was able to take up residence in Nijenrode, a castle whose history goes back to the year 1270. We use the castle itself for administration and lectures, while the students live in separate blocks built in the sixty-acre park that surrounds us. Holland is a compact country, so that we are within easy reach of important towns. Utrecht is seven miles away, Amsterdam thirteen, Rotterdam and The Hague about thirty-five. The most important libraries, the chambers of commerce, the harbours, the government departments, and the great concentrations of commerce and industry lie almost on our doorstep.

Student Activities

Of far greater importance, however, is the quality of the life led by tutors and students within the walls of the college. For we must remember that our students do not come to us merely to be put through an educational sausage-machine. On the contrary, they are the people who, in the first instance, build up the communal life and decide its quality. The value of their years with us depends, above all else, upon their own activities and their own contributions to the general good. Many Vice-Chancellors of Dutch Universities complain about the nihilism of their students, who join no clubs and pass their years of study in complete isolation. Our college life is designed to prevent these faults. We

make every student belong to the student fraternity, to which we delegate as many responsible tasks as we can. In this way the students learn to accept responsibility in surroundings where they have every chance to profit from their inevitable mistakes.

An intensive, many sided club life is educative in a host of ways. For instance, students in charge of a canteen or a bar have to learn how to buy and sell, how to administer and organize, and how to maintain good order. Much the same is true of a photographic club or the editorial board of a college magazine. Cultural societies like the Art Club, the Netherlands-England Association, the Alliance Française or the Deutscher Klub help to develop organizational flair in the planning, arrangement and presentation of programmes. And the same thing is true of even such frivolous matters as the organization of a pleasant summer dance or a Commemoration Ball.

One of the most important qualities that must be developed in young business-trainees, especially if they are to become exporters, is a feeling for personal relations. They must be able to assume responsibility and to wield it. They must be sensitive in their dealings with others. They must grow subtle enough to understand the complex relationships that exist between different people and different groups, so that their working methods are flexible and free of red tape. So we must let them prepare themselves in surroundings where mistakes or slips will not be disastrous. We must give them real responsibility and authority. We must encourage them to keep order amongst themselves and give them as much freedom as possible to make their presence felt in the world at large. There are, of course, inherent dangers. But you cannot teach young men without taking risks.

Physical Training

The qualities that I have been talking about—organizational ability, team spirit, resilience, and self-discipline—can also be developed through sport; both by the means of sports clubs and through the physical training periods that appear in our time-table.

And let us not forget that a businessman needs a sound and sturdy physique. Modern business, especially abroad, is extremely strenuous. The man who knows that he is physically fit for his job has that extra self-confidence that allows his bearing and behaviour to stay relaxed and natural. In my view, a college such as ours has a definite need for expert sports instructors who understand their special task. We certainly think ourselves lucky to have three of them: an Englishman, an Austrian and a Chinese from Indonesia, who has studied in America. Thanks to this international background and to the foreign languages that they use in their lessons, they not only carry out their own job, but also help their colleagues in the language department.

TUITION

In addition to carrying out this character training, which I have dwelt on at such length, it is obviously necessary that we should try to teach a great deal of

useful knowledge. Perhaps that remark will reassure those of my listeners who have begun to ask themselves whether this paper has anything to do with its title. But I am absolutely convinced that, in such a delicate field as export, the most important question of all is the man and his quality as a human being. Knowledge comes second to character.

A delicate field. We all know quite enough about the growing difficulty of exporting; about the cut-throat competition between East and West, and between the various countries of the West; about the sensitive national feelings of the developing countries and of their frequent anti-Western sentiments; and we all know how urgently they want to take business and commerce into their own hands. Consequently, the man who is to be an exporter needs to have the utmost tact, adaptability, resilience and understanding; his attitude to the new nations should be helpful and sympathetic, and never colonial or patronizing; hence the emphasis that I have laid on character training.

But I am well aware that young men who cannot speak languages well, or who know little about the customs and manners of foreign countries, will fail to be adaptable. And they will fail their firms if they are not experts in their products, or if they do not know about the state of the market, sales possibilities, financing, transport, legal complexities—and so on.

It is the job of our tutors to teach them these things. But it is not a job that anybody can do—no matter how learned or expert he may be. Of course, a tutor must understand his subject and have a flair for teaching. But, beyond that, he must have a tremendous interest in the practical side of business, for it is his task to prepare his pupils to do practical jobs of work.

Economics and Sociology

One must guard here against over-specialization. Modern business has an increasing need of specialists, but these have to have a long university education behind them. An ordinary member of an export department—a salesman, if you like—need not be an academic specialist. Yet he must know enough to be able to use the services and information supplied by the specialists. For this reason, we do not teach economics, or psychology or law as academic subjects. On the contrary, out of these and other subjects, we carefully select just those aspects of them that will enable our students to understand how a commercial firm is organized and conducted. The focus of all our studies is the commercial undertaking itself—not from the technological point of view, but from the organizational, administrative, social and, above all, commercial standpoints.

For instance, the study of the laws of ancient Greece and Rome may be essential to a jurist. But it is far more important that our future businessmen should learn something about the legal aspects of agreements, contracts, patents and trade marks; they must know about the laws governing transport and insurance, about the statutory regulations affecting agents, and, above all, about the more important legal complexities of foreign trade. They must learn enough to be able, later on, to know when they ought to call upon the services of their firm's legal department.

The same is true, *mutatis mutandis*, of the other subjects that we teach. But, whatever the subject, the emphasis always falls upon commerce, upon marketing and upon exporting.

Consequently, in the fields of economics and finance, we set great store by analysing current problems and examining such organizations as The International Monetary Fund, The World Bank and The Export-Import Bank. We study questions of external organization in the same way as those of internal organization. Before our students can understand a balance sheet, or a firm's annual report, or a share-prospectus, they must acquire a real grip of essential financial principles. In addition, we want them to be able to interpret business and government statistics. Yet all the time we must emphasize the typically commercial subjects of buying and selling, market research and publicity, exporting and the search for foreign markets, transport, insurance, credit extension and the importance of bodies like the E.E.C., the European Free Trade Association, G.A.T.T., and so on. We must tell them, too, something of the special selling techniques necessary in non-western countries.

The psychologist and sociologist must play their parts here by explaining the great sociological and psychological differences between the various trading nations and by showing the consequences of their different religious, political and racial backgrounds. They must deal, too, with the psychological aspects of market research, advertising, buying and selling. And they must awaken and develop an understanding of the psychological and social relationships that exist within every firm.

You must forgive me for dealing with a long list of subjects in so summary a fashion. But I wanted to give you concrete examples of what I think ought to be taught in a commercial college. I would add that one must never be content with a comfortable, traditional programme. For the sake of continuity and the health of one's college, a hard core of permanent teaching staff is required. But, for specialized subjects, it is better to invite experts as guest lecturers, provided that one has first checked their ability to teach! Nor must one be afraid to introduce unusual subjects. Economic Geography, for instance, is so often taught with the accent on the second word. Frequently it degenerates into an arid mass of figures and tables of products. We have replaced it with Commercial Geography, with the accent on 'commercial'. We deal first with the commercial relations between different countries, and only afterwards with the geographical, historical, religious, racial, climatic and other conditions that must be grasped as a background to the commercial situation.

A new subject that we have recently introduced is the study of the relationships between government and industry. Whether we like it or not, these relationships have enormously increased during the last ten years in every country. So we have a duty to keep our future businessmen abreast of events.

From time to time we invite foreign speakers to address our students. The F.B.I. report *Export Trade Facilities*³ says: 'We commend the scheme . . . for an exchange between staff of technical colleges in the United Kingdom and the United States . . . which will enable teachers . . . to give more informed

instruction . . . about sales problems in the North American and British markets. This scheme might well be adopted under similar conditions for other markets.' I believe that the Netherlands is certainly such a market, particularly since so many of our people speak English.

Languages

The foreign tutors amongst us not only help us to learn about what is happening in their countries, but they also do much to increase our students' command of languages. We are convinced of the truth of most of the remarks made in the McMeeking report⁴ on the necessity for learning foreign languages. In this report I read: 'We believe that there is room for . . . full time intensive courses with vocabulary and content specially selected for commercial needs. . . . Instruction in the language should be reinforced by instruction in such subjects as commercial conditions, business practice and social customs of the countries concerned.' This is exactly what we have been doing for the last thirteen years. The report goes on to say: 'We have been advised that German is likely to prove the most widely required language, followed by Spanish, Portuguese and French. In the Middle East, French and English are the main languages for correspondence, but any firm that intended to maintain representatives there would, of course, be wise to ensure that they had some knowledge of Arabic. Nor should the advantages of Russian, Japanese and Chinese as commercial languages be overlooked.' That, for us, is too much of a good thing. But at our college Dutch, English and French are compulsory languages. In addition, 85 per cent of our students study German, 75 per cent Spanish, 7½ per cent Russian and 2 per cent Arabic. For the time being, we must shelve thoughts of Portuguese, Japanese and Chinese.

Practical Work

Another section of the F.B.I. report⁵ that I mentioned earlier contains these words: 'We are also impressed with the long-term value to our export trade of the exchange of young engineers, commercial students and apprentices. . . . Many of those who have received part of their training over here will eventually be in a position to influence the buying policy of their firms. At the same time, our young people will bring back a knowledge of foreign markets which will be useful to the export departments of their firms.'

It is with similar thoughts that we send our students out to work with business firms. During their time with us, they spend one month working with a Dutch firm and one month with a foreign concern. The reports, which we make them assemble and present, constitute an enormous fund of practical knowledge for students and tutors alike. We also train our students for the future by taking them on regular excursions to various firms, where their attention is especially directed towards the export departments. Occasionally we have excursions to the Ruhr or to the European Coal and Steel Community in Luxembourg. Every six months or so our tutors make a carefully planned one-day or two-day visit to an important Dutch firm.

LENGTH OF COURSES

I feel sure that some of my listeners will at this moment be saying to themselves: 'This is all very well—but does anything of practical educational value emerge from this long, miscellaneous list of subjects and activities?' And, if they knew that the whole of our training lasts for a mere two years, they would ask this question with even greater force. My answer would be: 'Less than we want, but more than you think'. Of course, in a way, we should welcome more time. However, I think it wise of the business world, which gave birth to our college, to limit us to two years. The average age of our students is 21. Allowing for their two years of military service, they will be about 23 before they start working in firms. The limitation imposed on us has its good side. We cannot give more than a general training in business, and we should not attempt more. The specialized training needed by those entering different branches and types of business must be undertaken by the employers themselves. We have to make the most of our time by keeping our course as intensive as possible: we have 37 teaching periods a week and 40 weeks of term a year, not counting the four-week working period.

Our shortage of time forces us to work methodically. First, we must analyse and select our subjects with extreme care. Then we must co-ordinate them in a new whole centred on the business undertaking. This means that we must employ the sort of tutor who is prepared to co-ordinate his subject with others—even at the expense of some of his special interests.

SELECTION

Above all we have to find tutors whose characters and enthusiasm will enable them to shoulder the all-important task of character training. Not only must they be vivid teachers, but they must, through their studies, be able to advise, control and lead their pupils.

We must also select our students, if we are to get good results. We therefore insist that they should have obtained a school-leaving diploma from their grammar schools. I am told that this is roughly equivalent to two or three passes in the 'A' level of the G.C.E. Furthermore, not every young man is suited to life in a residential college, nor to a life in business, especially in commerce. Therefore a number of industrial psychologists, among them a Professor from Amsterdam University, test every candidate for admission. They reject between 25 and 30 per cent and we lose another 12 per cent during the two years of study.

RESULTS

In our thirteen years of existence, we have awarded 1,120 diplomas to successful students. We have lost contact with 5 per cent of them; 9 per cent are in military service; 2 per cent are engaged in further study in the Netherlands; 4 per cent are studying abroad; 27 per cent are employed abroad; and 53 per cent are employed at home. Nearly all of those who are working are employed in business and commerce, most of them in export departments. If we take the 53 per cent

and 27 per cent, whose employment we are certain of, and refer this back to 100, then 1 per cent are employed in journalism, 3 per cent in government service, 7 per cent in transport, 7 per cent in international banking, 8 per cent in miscellaneous jobs such as hotel management and insurance, 38 per cent in commerce and 36 per cent in the social, administrative, organizational and, especially, commercial departments of industry.

Consequently the college believes that it is doing its intended job. That this is believed in other quarters is proved by the fact that the Dutch business world has so far contributed $2\frac{1}{2}$ million guilders; that the government has taken over our budget deficit of 20 per cent; that H.R.H. Prince Bernhard has become the Honorary Chairman of our Board of Governors; and that the interest shown in us by foreign countries and our contacts with them are steadily increasing. My task here to-day is, perhaps, a small token of this interest. I am certainly very grateful for the chance that has been given me to tell you something of our work. For, as the world grows smaller and fuller, contacts increase. Europe is on the way to much closer co-operation, as the E.E.C. and the European Free Trade Association bear witness. These two groups will certainly grow closer together. If we succeed in achieving full union, we may expect an enormous resurgence in Europe—as American investments on this side of the Atlantic already indicate. For the intensified commercial activity that will result, we shall need many men—men of knowledge and skill—men who can break through the barriers of language—and above all, men of human understanding. Europe's economic future depends upon there being sufficient men of good calibre. Schoolmasters, with all their dreams and ideals, must learn to work with the industrialists and commercial leaders. As I see it, there is no other way of turning out the young men that Europe requires.

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2. Perry Miller, *The Atlantic Monthly*, Vol. 187, 3, March 1951, pp. 41-5.
3. Federation of British Industries Report, *Export Trade Facilities*, London, 1959.
4. Ministry of Education, *Report of the Advisory Committee on Further Education for Commerce* London, 1959, pp. 19 and 20 (paras. 70-73).
5. Op. cit., p. 12, para. 18.

DISCUSSION

THE CHAIRMAN: It is a delight that we have representatives of the teaching staff and of the students at Nijenrode here, and I should like to assure them both that here they are on neutral territory and can, if they wish, disagree with the Rector perhaps more safely than they can at Nijenrode!

I should like to ask him to amplify the passage in his paper which referred to the self-discipline which the students practise. I think Dr. Postma has carried that to what might be considered quite daring limits, but with good results.

THE LECTURER: I am just looking at some students! Perhaps they could give their own views on the matter? Who feels daring enough to tell us something about it? Well, I can say this at any rate: that we also have looked to England for this experiment and though we call the students who have to maintain discipline in our College *potentaten*, an old Dutch word, we have looked to your prefect system, and your prefects have the important task of maintaining discipline and order. The head of our residential quarters is still ultimately responsible for the maintenance of a good discipline on the campus, but the prefects themselves also have a certain authority.

From time to time it happens that the President of the Students' Fraternity comes up to my office with a very sad face, and announces that one student has misbehaved himself too much, and asks me if I am willing to rusticate the student for a week; very unwillingly I yield to this request! In a certain way it is a play, but I think a useful play at Nijenrode. Would Mr. Hoorens van Heyningen be willing to say something about it himself?

MR. HOORENS VAN HEYNINGEN: Of course there are many students in school or on the campus who need discipline or rules. It is not possible to have those people brought together without rules. Formerly, I think, when those rules were looked after by the staff, they were much more severe than now when we do it ourselves. Besides that, I think the responsibility is very good for us. It is not always easy to punish some people, but we have to do it.

THE LECTURER: But not corporal punishment!

MR. HOORENS VAN HEYNINGEN: From that point of view, I think it is a very good system that we have to punish ourselves!

MR. ARNOLD LISSAUER: Could Dr. Postma tell us what the fees are and whether there are any scholarships?—also, where the teachers are recruited from?

THE LECTURER: The fees are 3,000 guilders—that is about £300 per year—inclusive of board and lodging, books and tuition. Of course, the student has to take care of his own pocket money and his own clothes. There are scholarships offered by the government, and there is also a special fund. Twenty-four per cent of the students receive financial help, one way or another, through grants ranging from £50 to the total amount of the fees.

The teachers come from different fields of education, and we have quite a number of foreigners too. There are four British teachers on our staff, an Austrian, an American, a French-speaking Belgian and an Indonesian. We find them very useful for the teaching of foreign languages. Our Dutch teachers are in part economists, but there are also people with other degrees. We do not ask for a certain status, so a man on our staff may be a doctor or a professor, or may have only just passed his Dutch candidate's examination or his Baccalaureate. The first thing we ask is that he should be a good teacher.

MR. LISSAUER: Do you recruit teachers from industry?

THE LECTURER: From time to time, yes, but for the most part the best men in industry are more highly paid than the best educationalists, and so a man must really be an idealist to come over to education. I am glad to say you find such people, even in our College.

MR. P. CHARLES HOWELL: I believe that Dr. Postma said that the average age of his students was 21. Does that mean that they come from industry and have already had some experience since leaving school, or do they in fact come straight from school? If they come from commercial firms, is it the practice amongst the firms in Holland to sponsor students and send members of their staffs to the College for this course?

THE LECTURER: The average age is 21, because only a small fraction of Dutch secondary school boys really succeed in ending their secondary school career when they are about 18 or 19 years of age. But when they are 20 they have to do military service, and so thirty per cent of our students have done their military service and come to us when they are 22 or 23 or 24.

Only a very few come to us having been sponsored by commercial firms. Philips, Unilever and a few other firms send us a few of their more gifted people who have had a secondary school education, but they only come to get extra education in the commercial field.

MR. W. H. BEETON, C.M.G. (Oversea Service): I wonder if Dr. Postma could tell us roughly what the ratio is between students and tutors? Secondly, does Dr. Postma think it an advantage to his courses to hold them in an old and historic building?

THE LECTURER: There are 250-260 students, the permanent staff consists of 32 members and then there are 40 guest lecturers who come from time to time.

Is there an advantage in having the institution housed in a castle? Sometimes we think yes, sometimes we think no; but we came to Nijenrode quite haphazardly because of the enormous shortage of housing after the war, and we were then very lucky to find this castle and the adjoining park. There are plans for building more modern lecture rooms and administrative offices in the same park so that we could use the castle as a reception and meeting centre for commercial people; but it will take some years before these plans are realized.

MR. G. B. JACKSON: Could Dr. Postma elaborate on the examinations taken by his students, and tell us if there is a national diploma for examinations in commerce in Holland?

THE LECTURER: The examination taken by the students is a school examination. A question which we discuss from time to time is whether we ought to have an official external examination board or not. It would not be difficult to organize such a thing, since there is not a national examination in commerce. It does not exist in Holland. Our position is still very free and I think that it is wise to keep it like that for the coming ten or fifteen years or perhaps for an even longer period.

Education in Holland is on the move at the moment. Our present Minister of Education has worked out a big plan, it is even called in Holland the Mammoth plan, for a reorganization of Dutch education. The Minister has consulted 85 organizations of schoolmasters, teachers and so on, but he forgot to consult about 17, and the greater part of Holland does not believe that this plan will ever be realized, because it is one of the most difficult tasks there could be. At any rate, the Ministry is in favour of our experiment—we still consider it an experiment—and wishes to give it as much freedom as possible, and that is why we still are not in a certain drawer of the department at the Ministry of Education. I think that is a favourable circumstance, though from time to time it is also a difficulty. It proved to be one when the Ministry wanted to take over our budget deficit, but they have instituted a special department of experimental schools and we belong in that department, and so we will retain our freedom, which is very important. So we have no national examination, no examination with a committee from outside. This causes certain difficulties from time to time; with certain tutors I think it would be wise to have a committee from outside. On the other hand, I think it would be a loss for the College as a whole, because as soon as there is a standard examination you get everything noted down; a certain 'stonification' or petrification would result; it would all become very rigid, the tutors would start drilling their pupils, and that is a thing we must avoid at any price.

MR. C. E. BROWN (Principal, Balham & Tooting College of Commerce): Does the diploma awarded at the end of your course take into account the opinion you have gathered of the student's character over two years, besides the examination? Also, could Dr. Postma tell us a little more about the work experience of the students, both at home and abroad, and what he expects of the firm and what he expects of the student?

THE LECTURER: Indeed, we not only give the students credits for their different subjects, but also judge them for their individual and social behaviour; and so we try to assess something of their personality. The students themselves co-operate in this assessment of their more personal qualities. There is a committee of the tutors and residential leaders, and of the tutors and the students themselves, and it tries to

assess whether a student is very good, good, sufficient or insufficient. We go as far as this: that when a student is even very good or excellent in respect of tuition and subjects, but unsatisfactory in his personal behaviour, we would not grant him a diploma. I think it is more important that we deliver a good man than a very intellectual criminal.

That is the first thing. Then the working period, of course, is very short. The students arrive at Nijenrode in the second half of August, and our Christmas holidays start on the 19th of December, and on the 4th of January they all have to start their work period. Since in the first year they have only been for three and four months at Nijenrode, it is of course taking a risk to send them out to firms as students from Nijenrode, but they are well prepared and I think that only one per cent lets us down.

Of course, this does happen from time to time. The student joins a firm, and after three days he knows everything about it; he is reluctant to pursue his work any further, and he lets us down. Every year there are one or two like this. But the majority of them come home to the College with a report, and of course we do not expect that they will be an asset to the firm at once. They cost the firms many man-hours of work, but the firms themselves co-operate in a very helpful way. The College is closed during the work period, so that first-year students working in Holland have to find board and lodging for themselves, and the cheapest way of doing so is at their own homes. People from the countryside often find work in factories and mills, but for the students going abroad it is more difficult. I am very glad to say here that many English firms have begun to co-operate with us: we began here with a firm in Kingston-upon-Thames, and more and more firms, particularly in the neighbourhood of London and Slough, help us a lot by their willingness to accept an apprentice or commercial student, a Dutchman, for a mere four weeks.

We have an exchange with France, so it is our duty also to find places in Holland for Frenchmen. There is only one difficulty: though our students speak a little French, the Frenchmen coming to Holland do not speak a word of Dutch and nobody understands a word of their English! Twenty or twenty-five of our students are in Spain at the moment and the same number in Germany, Austria and Switzerland, and before I left for England I received a picture postcard from two students working in Morocco, and another one from a student working in the Lebanon.

MR. BROWN: Do the students find their own work experience or do you arrange it for them?

THE LECTURER: They find their own employment in Holland, but we arrange for most of the posts abroad.

MR. L. J. VANN: May I ask Dr. Postma to indicate the relationship between the sort of training he has outlined and specialist training such as technical training? I gather that students in Holland leave school at about 18; they do their military service, and then take this two-year course which, Dr. Postma has said, avoids specialization. They then join firms and may go overseas as representatives. Now if one is concerned with overseas technical representation, that seems to me to leave completely out of the picture the sort of technical training which in this country would occupy, say, four or five years of a young man's life. So may I ask—if it is not over-simplifying the question—whether this course is regarded as an alternative to a technical training, or if it is not, whether it is usual for students who finish the two-year course to go on to take an engineering course, or suchlike, before going into industry and commerce?

THE LECTURER: That is a problem apart. Of course there must be technical specialists to sell the technical equipment, and that is a growing need in the Netherlands as well, I suppose, as in other countries. The typical salesman is particularly interested in people, he is a typical contact man, whereas the technical

man is interested mostly in objects, machinery and tools, and he is—to put it at its most extreme—not interested in men. It is very difficult to find the man who unites both aspects of the salesman.

We have tried to contribute a little to the solution of this problem by introducing a one-year special course for technical people who come from what is called in Holland the higher technical school (which is not a technical university), where they have spent three or four years. Amongst these people there is a small number who are also interested in selling, and our one-year special course tries to give them the commercial tools to sell their technical equipment. There is only a small group of them; we have been running this course for five years, and it is quite successful, because these people are very sought after and very much appreciated, and they find very good jobs. These people who have been for two years with us do not, as a rule, go on and study at a technical university—one of them did so, but he was the exception that proves the rule that they don't.

MR. W. H. TAYLOR (General Electric Company Ltd.): I should like to ask whether there are any foreign students at this school, and if so, whether they come privately or are sent by firms, in particular by firms in England and France? I should also like to know if arrangements are made in Holland to provide practical commercial experience in firms for foreign students.

THE LECTURER: There is a limited number of foreign students in our college. We have an exchange programme with American colleges and universities and with a German university, so that we have four or five Americans and one German each year. At the moment we have a Persian student and there are always a few Belgians, who come privately. The difficulty is that the greater part of our lecture programme is given in Dutch, so that, if these foreign boys really want to profit from their stay with us, they have to learn quite a lot of our language. For the benefit of our Americans and other English-speaking students, we have a special course trying to imbue them with as much Dutch as is possible, and we are still considering the possibility of organizing in the future a foreign branch of the N.O.I.B.—but this needs some very careful consideration.

As far as the second part of the question is concerned: there are indeed many Dutch firms that are prepared to give practical experience to visiting foreign students—and to pay them into the bargain! They offer technical, administrative or commercial experience. The arrangements are made in various ways: sometimes through local Chambers of Commerce; sometimes through a body known as A.I.E.S.E.C., which is an organization run by students; and sometimes through other intermediaries. For instance, the N.O.I.B. arranges annually for 15 or 20 French students from the École des Hautes Études Commerciales in Paris to spend a period of practical work with Dutch firms, while they arrange places for our students with French firms.

MR. BEETON: I work in an organization, Oversea Service, which in certain respects has a good deal in common with Dr. Postma's school, and much of what he has said to-day has made me rather jealous. We deal with the imponderables which Dr. Postma has mentioned, but we only have people for six days instead of for a two-year course. Nevertheless, we find a good deal of what you found, Dr. Postma. It is essential that the tutor-studentship relations should be close; essential that the course should be residential. What has made me jealous is Dr. Postma's description of his endowment fund: we have none. I am quite sure that the creation and maintenance of good personal relations between our representatives abroad, in commerce, industry, government service, or voluntary service, and the citizens of their overseas home is absolutely essential. If people are not convinced of the importance of good relations with the people they are going to live and work with, they should not go abroad.

In the courses Oversea Service organizes, we do not insist on any educational qualification beforehand, and it is remarkable how people of different educational qualifications can get on together; two factors are necessary for this—the common interest that all members of a course have, in the region of the world to which it is devoted, and the maintenance of an atmosphere in which differences can be expressed in a friendly manner and people can become forthcoming in the expression of some of their deepest feelings. Our courses are limited to one region of the world at a time. I think the main thing is really the atmosphere in which courses are held, and the insistence on character development to which Dr. Postma has referred.

DR. H. KOEPPLER, O.B.E.: If all Dr. Postma's products are as good as the ones he sent to Wilton Park, where they were by far the youngest, then I must say the emphasis which he has placed on character training, on being able to get on with other people, has produced quite remarkable results.

MR. ST. JOHN NIXON, N.O.I.B.: I should just like to say that I have been in Holland now almost from the start and have enjoyed myself very much indeed. In my first ten years, I was head of the residential quarters, and one of my most difficult tasks was to instil some common sense into a lot of wild Dutchmen! I survived, however, and everything that Dr. Postma has said points to the fact that it is an extremely stimulating institute in which to work.

THE CHAIRMAN: Dr. Postma has taken immense trouble in the preparation of his address and every word of it has been worth listening to, but the impression that he left above all with me was, how foolish it is to think of education in terms of money, of lavish buildings and the like! He happens to operate in a castle, but I am sure we all felt that it is the spirit of the head of a concern like his which is the real making of any educational establishment. It has been a privilege to meet Dr. Postma as a person, quite apart from the interest of hearing about the fascinating work being done at his school. Professors in my young days were felt to have a great deal to convey and decided unwillingness to receive, but if I may use Dr. Postma's delightful word, 'stonification', I think it was quite evident from the way in which he received the comments from the floor that that is the very last disease he is ever likely to suffer from! We thank him cordially for his address.

The vote of thanks to the Lecturer was carried with acclamation, and the meeting then ended.

THE TRAINING OF BRITISH STAFF FOR OVERSEAS POSTS

A Symposium of papers by

A. R. THOMAS, C.M.G., Assistant Under-Secretary of State, Colonial Office; B. F. MACDONA, General Manager, Barclays Bank D.C.O.; W. H. BEETON, C.M.G., Training Officer, Oversea Service; and A. T. M. WILSON, Adviser, Personnel Division, Unilever Ltd., read to the Society on Wednesday, 17th February, 1960, with A. R. N. Roberts, of Imperial Chemical Industries Ltd., and a Member of Council of the Society, in the Chair

THE CHAIRMAN: This meeting is the second of two in this Session of the Royal Society of Arts which have been devoted to the question of training men for employment in other countries. Five weeks ago Dr. Postma, Rector of the Netherlands College for Representation Overseas, gave us an account of a Dutch experiment of great interest and promise. To-day the distinguished panel on my left and my right will convey I hope to all of you that Britain is not unaware of the importance of the same subject.

Since we have four speakers, may I suggest that at the end of each of the papers we take up points merely for classification and not for discussion? I had some difficulty in deciding upon the order of calling on our speakers, but I have tried to be guided by Palgrave, who in his introduction to *The Golden Treasury* said that he had arranged his items in what he conceived to be the most poetically effective order. I have sought to do the same this afternoon, and the first speaker that I am going to call on is Mr. Thomas. At a tender age he attained the rank of Under-Secretary of State at the Colonial Office, and as Chief Secretary to the Governor of Aden earlier in his career has himself had experience of the difficult art of adapting oneself to the thought and methods of a distant State. I am confident that he will give us a good start.

The following paper was then read.

MR. THOMAS'S PAPER

I have been asked to contribute to the Symposium something about overseas service training in the United Kingdom; and I am very happy to have the opportunity to address this famous Society, particularly as I see from your brochure that for some 200 years your interest has extended to the British possessions overseas. In those days evidently you gave much attention to the North American colonies; and perhaps I may say that to-day we have many happier examples than that of relations between Whitehall and our overseas territories. One thing, however, many territories still have in common with those old American colonies—an interest in attaining self-government; the difference between then and now is that to-day that ambition is fully supported by Her Majesty's Government, whose policy it is that overseas territories should be given every opportunity to advance progressively along the road to self-government.

That fact is of great significance for the civil services of the colonies and for their training. To make a reality of our declared policy, it is necessary to ensure that the public services overseas are well adapted to local conditions and are staffed to the greatest possible extent in all grades by local people. Fundamentally that means providing educational facilities sufficient to create, among other things, a wide field of qualified candidates from whom the best can be appointed to the public service. With the improvement of local educational facilities in recent years it has become the practice of colonial Governments to fill all posts in the basic grades, at whatever level, by local recruitment whenever this is possible, and only to ask H.M. Government to recruit externally if there are considered to be no suitable and qualified candidates available locally.

Once the recruits have been selected and appointed, it is then necessary to teach them their jobs, either by a process of trial and error in the daily round, by formal training courses at various stages of their careers, or by a combination of the two methods. The great majority of the recruits to the public services in the colonies are necessarily given their entire training, whether on the job or on courses, in their own territories. For a small minority, however, adequate training cannot be provided on the spot, either because their work is of too high a grade or because it is too technical for the training resources of the territory. It is for those people that training courses in the United Kingdom, with which this talk is concerned, are provided. Such people attending courses outside their territories may be either locally-domiciled or expatriate officers; and, with the growth of local recruitment which I mentioned, the locally-domiciled officers now out-number their expatriate colleagues on our courses. In their training the two groups are united by common interests, studying side by side in the U.K. for the same purposes, to improve their qualifications, just as they work side by side out in their territories. Except for a few small changes to meet the special needs of people unfamiliar with conditions of living and study in the U.K., the courses for both locally-domiciled and expatriate officers are identical.

In arranging this training, the Colonial Office draws on the resources of many authorities and institutions, most notably the Universities of Oxford, Cambridge and London. Wherever the officers go, they are likely to find themselves among other students, studying the same or similar subjects for other purposes. They do not find themselves in an overseas service staff college, because no such place exists; it may be worth explaining why. There would indeed be some advantages in having such a staff college. The problem of day-to-day administration would be comparatively simple; an orderly curriculum could be devised because the teachers, unlike university teachers, would have no competing responsibilities; it would be easy to control both teachers and students and the content of the teaching. A great deal of teaching and information could be economically provided in one convenient centre, where students would find their way around much more easily than among many scattered educational institutions. On the other hand, to send officers instead to the universities among other students enables them to test the soundness of their

ideas against the opinions of others, thus developing their minds in the best way, and also removes any suspicion of propaganda and indoctrination which might attach to instruction in a staff college by Government appointed lecturers. At the same time, colonial studies can be kept in the main stream of education in the U.K. and interest in and a sound knowledge of colonial affairs be diffused much more widely among educated people than would otherwise be possible. Furthermore, the range of subjects which overseas service officers need to study is so wide and embraces so much more than what might be termed purely colonial subjects that nothing less than the resources of one or more major universities would suffice to provide it. Where the facilities exist already, if somewhat scattered through the country, it would be hard to justify duplicating them in a separate institution, a staff college, at enormous capital expense. For these reasons it has always been felt that in British conditions the balance of advantage weighs against the idea of providing a staff college and in favour of that of using existing educational facilities, especially in the universities.

Overseas service training has been provided in the U.K. since before the 1914-18 war; the present pattern, however, was formed soon after the end of the 1939-45 war as a result of the recommendations of the Devonshire Committee. Its most notable features are two courses, each lasting an academic year, which were for some years called the First Devonshire Course and the Second Devonshire Course and which are now called Overseas Services Course 'A' and Course 'B'. Course 'A' is held at Oxford and Cambridge, and Course 'B' both at those universities and at London. Those courses are by no means the biggest in numbers, but they are key courses, because they are designed to develop the talents of officers who are likely to be in the field of people from which the highest administrators and departmental heads in the service are selected and who as administrators (general or professional) probably have a greater influence than any other officials in advising Governments on policy and in seeing that the decisions of Governments are effectively carried out.

The purpose of Course 'A' to-day is to give administrative cadets a general preparation for their future work; to acquaint them with the current situation in overseas territories; and to teach them the minimum of indispensable knowledge with which to begin their careers. The subjects taken include anthropology, economics, field engineering, field surveying, geography, government of dependent territories, history, land use, a relevant language, law, local government, colonial accounting and tropical hygiene.

The purpose of Course 'B' to-day is to give officers of several years' standing the opportunity to check, criticize and clarify the experience which they have gained in the field by fresh study of subjects relevant to their work; to see the affairs of their territories in relation to the region, the British Commonwealth, foreign colonial administration, and world opinion; to study the relationship between the various Departments which make up the machinery of government; and to pursue the study of a subject or subjects in which they have developed a special interest or to which they may be directed by their Governments. The course is deliberately kept flexible and free from regimentation, and the amount

of benefit which an officer derives from it depends on the use which he is willing and able to make of the many opportunities offered. The subjects from which a choice may be made include the whole range of those which I have already mentioned in the curriculum of Course 'A' and in addition a few others, notably education, labour and a study of Islam. Before Course 'B' begins each year a Summer School is held either at Oxford or Cambridge to enable all the officers attending Course 'B' at any of the three universities to meet one another and the university teachers, to be advised about their future studies, and to be gently initiated into a university life which may be strange to them. A pleasant feature of Course 'B' is the presence of French, Belgian and United States officers nominated by their Governments. In return we are given opportunities to send overseas service officers on courses in France and Belgium.

Course 'A' provides training for administrative cadets only, but Course 'B' provides training for both administrative and professional officers. The Colonial Office is also responsible for many courses which provide especially for the training of professional and technical officers, either on first appointment or later. Indeed, the number of such officers attending courses greatly exceeds the number of administrative officers. Among the most important of such courses are those dealing with agriculture, forestry, fisheries, education, engineering, medicine, and police. To give two examples of what is done on these courses: Agricultural Probationers, recruited after taking their first degree, usually spend one year training at the School of Agriculture, Cambridge, and a second year at the Imperial College of Tropical Agriculture, Trinidad. Education Probationers are required to take a course lasting one academic year at the Institute of Education, London University; and they receive also some instruction in relevant languages at the School of Oriental and African Studies. Higher courses are provided as necessary for the advanced training of experienced professional officers.

In arranging all this varied and extensive training, the Colonial Office does not work alone. From what has already been said, its debt to the universities is obvious. In addition, many courses are provided by or in co-operation with other U.K. Government Departments or independent public institutions, notably the British Council and the Royal Institute of Public Administration. The Colonial Office also receives much help and co-operation from the local government service of the United Kingdom. In many British territories development of the representative side of local government, with elected councillors, has long been considered an important training ground for democracy; that development has, however, tended to outrun the development of the executive side, the local government service, which has to carry out the directions of the councillors. To help put that right opportunities are now provided for officers to study local government here both in theory and in practice, the latter including attachments to Local Government Authorities.

Perhaps the newest field of training into which the Colonial Office has ventured—and one to which I can only give a bare mention—is the training of locally-domiciled officers for new foreign services in colonies on the point of obtaining independence.

The training arrangements which I have mentioned meet the needs of roughly 2,400 people a year at present and necessarily cost a good deal of money. Much of the cost is met by the colonial Governments themselves. Much, however, is met by H.M. Government, which provided in the period 1945-59 a training allocation of Colonial Development and Welfare funds amounting to £2,225,000, and for the period 1959-64 has promised another £775,000. Other special grants have also been made.

In these ways we are doing our best to ensure (as I hope that this all too rapid survey has shown) that the civil services of the overseas territories are well-fitted to fulfil the complex requirements of modern administration both in present conditions and in the conditions of self-government which lie not far ahead of many of them.

THE CHAIRMAN: I do not know whether, pursuing my mixed metaphor, I should say that Mr. Thomas has wielded his bat or tuned his lyre to our entire satisfaction—but certainly he has fulfilled my promise by giving us a first-rate start.

MR. G. W. I. SHIPP (Overseas Employers' Federation): May I ask how long the second Devonshire Course lasts?

MR. THOMAS: One academic year.

THE CHAIRMAN: Our next speaker is Mr. Macdona, the General Manager of Barclays Bank D.C.O.—I believe the last three letters stand for dash, courtesy and organization! Mr. Macdona himself, of course, in his central position is particularly concerned with the organization. We shall be delighted to hear how you put the dash and courtesy into your young men.

The following paper was then read.

MR. MACDONA'S PAPER

'On the whole we shall be discussing managerial and other senior posts.' I am quoting from my invitation to speak to you to-day. When I read these words I thought, somewhat wryly, that they might well be written down on every page of my daily diary for the whole year. 'We shall be discussing managerial and other senior posts.' Indeed we shall.

The art, profession, trade or mystery of banking depends for its continuance upon having the right people in the right posts—and that, very largely, means having the right people as branch managers. And when, as in the bank of which I have the honour to be General Manager, you have 1,197 offices in 41 countries or islands spread across half the width of the world, the finding and placing to the best advantage of your 1,197 men in charge of those offices is something which can produce aches both in head and in heart.

Can you, by teaching alone, turn a young man into a bank manager? The answer, of course, is that you cannot. Thank Heavens we found that out a long time ago! You can teach a man everything that has ever been written about the practice and law of banking and you may, at the end of the road, find that your finished product is—an expert but hopeless banker. He will be hopeless if he lacks those vital ingredients of character, personality and *nous*, which will gain for him the confidence of his customers and of his staff.

So you have to go right back and start by selecting your seed well before you can grow your managerial flowers. You must choose as your new entrants to the bank young men who, in your judgement, have already within them the stuff which, in ten, fifteen or twenty years' time, will have flowered into leadership. To continue this flowery metaphor, choose the right seed, plant it carefully, tend the young plants—and don't hesitate to thin them out if they prove to be weedlings—re-pot occasionally so that the roots have a good spread and then, provided no disease or blight from outside sources damages the growth, your flowers will bloom in due season. But enough of this gardening metaphor, or you will be thinking that Mr. Barclay's managers are a lot of pansies.

Let me describe, quite briefly, the career of a typical member of the staff of Barclays Bank D.C.O. from the time he joins us in this country. Let us assume that our Staff Managers have done their job well with the material on offer. The young hopeful may have his home in Maidenhead. Rather than start him in his training in London, where the D.C.O. branches are large and, to a young man—and to many not so young—confusing and mysterious, we arrange with our affiliated bank, Barclays Bank Limited (they run the small offices in England while we run the big ones overseas), to put our man at a small English branch not far from his home where, for a year or so, he may learn something of the fundamentals of banking whilst still living at home. Thereafter he will come to London to one of our large branches, where he will be moved around, as frequently as desirable, from one department to another—the re-potting process. During this time he will be expected to sit for the examinations of the Institute of Bankers and will be required to pass Part One before he is considered for a transfer overseas. And then, when he is quite sure that he wants to go on with banking and when we, on our part, are quite sure that he is proving to be the type we want overseas, then, and only then, he goes on to the list for a move overseas. It is now that he may well go to one of Mr. Beeton's training courses at Oversea Service. (May I say how glad I am that friend Beeton is here to-day to read to you some recipes from his book. We in the D.C.O. think so highly of Oversea Service that we are, I believe, its biggest supporter.) As a last posting in England our young man comes up to our own training centre—together with some fifteen others—and spends an intensive six weeks being crammed with the practice and theory of overseas banking. Here he will not only learn the fundamental accountancy and routine of a bank in, say, East Africa, but will also actually put through transactions in a model branch where he will have to make the cash and book-keeping—especially the cash—balance. As soon as possible after he has completed this course he will go overseas—at the age, probably, of 23.

Let us assume that young Smith—I can't go on calling him 'he'—is sent to Kenya. He may well be attached in the first place to a big branch in Nairobi or Mombasa. The first part of a man's training overseas consists of helping him to adapt himself to his new surroundings, both inside and outside the Bank. Mombasa and Maidenhead may have many things in common—hard-worked

bank clerks for one—but they have much that is different. For one thing, Smith will find that the first lessons in multi-racialism have to be learned. There will be only half a dozen Britishers on the staff of the branch, but there may be sixty Asian clerks and a score of Africans. From the start Smith will learn to work with men and women of other colours and creeds.

But large branch banks are seldom the best forcing houses. As soon as our Local Directors in East Africa can arrange, they will move Smith away from Mombasa or Nairobi to one of the smaller branches in East Africa where he will find himself brigaded with a British Manager and Number Two, and a dozen Asian and African local staff. Here he will learn a lot. His next move may be to a smaller branch where he is himself the Number Two, or he may go to a larger branch as head of a section. We try all the time to widen his experience and give him the chance of accepting responsibility. East Africa is a territory which lends itself to this—the business of banking down at the ports is very different from that up in the Highlands or, again, from that in Uganda and the Lake Victoria basin. Over here you will find some differences in banking practice between say, Maidenhead, Marylebone and Manchester, but they will be nothing like the differences to be found in Mombasa, Molo and Mwanza. Banking overseas is very far from what it was in Tellson's Bank of *A Tale of Two Cities*. A young man in charge of an up-country branch is likely to find himself saddled with a wide variety of chores and responsibilities. One such sent in an amusing piece of verse to our Staff Magazine a few days ago. I quote therefrom:

The up-country banker's a versatile chap
At home with a ledger, a plan or a map.
He has to know building and cooking and tactics
That pull in the savings, the right prophylactics
And how to make porridge, brick walls and a profit
Put right an exhaust valve—and what is a Soffit?
He must see at a glance what is wrong with the plumbing
And know from the sky if wet weather is coming.
So banking is almost his easiest task
Compared with the other things customers ask.

* * *

Give a talk on 'money' at the local school
Mend the roof tank's ballcock—improvise a tool,
Try to make the compound look like Hampton Court
Wonder if Mohamed's goods are lying at the port.
Cash a dollar Traveller's cheque, view a stack of corn
Talk about insurance, fix a tyre that's worn.
Balance Bills Receivable, ask the watchman why
When you called and pinched his lamp he didn't bat an eye.

While Smith is gaining a broad knowledge of the practice of banking, he is encouraged to complete his technical knowledge and to finish off the second part of the examinations of the Institute of Bankers. There are certain financial rewards for completing this work, but we do not make an inflexible rule that a man shall be an Associate of the Institute before he can become a manager.

May I, at this stage, stress again that technical training by itself will never make a man to be the sort of banker that we need in our service but it will, of course, help every man without exception to become a better banker than he was before. In the formative years overseas a man will—we hope—learn to become a 'good citizen', even if his 'city' is only a small village. He will learn—we hope again—to be a leader. He will gain experience of the hundreds of different problems and tasks which come under the umbrella of banking. There is no substitute whatever for this experience gained in the field. But experience can be widened by surroundings being varied and it can be buttressed by training. Given these dimensions of length, width and depth, we have every chance of achieving our end—the right man in the right job.

Many of the banks in this country have training schools through which every man on their staff passes many times during his career—first, as a newly joined junior, then as a 'young hopeful', later as a Chief Clerk and finally as a potential—or appointed—branch manager. But it is not quite so easy either to centralize technical training or to space it out over ideal intervals of time when one has one's men spread over branches stretching from Kenya's icy mountain to Tobago's coral strand. And your technical problems in Tanganyika are apt to differ from those in Trinidad. If a day ever dawns when a General Manager of the D.C.O. declares himself to be fully satisfied with the bank's training programme, I hope, on that same day, his colleagues will start a collection for his retirement present—he will indeed have outlived his usefulness. One must continually improve one's plans. To this end, we hope in our bank to start very soon a training course for potential managers which will provide one of the buttresses to the wall of experience of which I have spoken.

To these new training courses men will come when they return to this country on leave from Africa and the Caribbean. To them also will come others, not of British origin, who, under the rapidly changing pattern of life in so many African and West Indian countries, are some of the first of their race to become bank managers. For them, the need is not only technical training but the general widening of horizons.

But, apart from these new training courses, we shall continue with a policy which started as an experiment but which has now become an investment. For many years we have had a steady stream of men coming to this country from South Africa, from Rhodesia, East and West Africa, from the Caribbean and from the Mediterranean. They come—white men and black men—not only to see how we run our banks in these islands but to learn also something of what makes this old country 'tick'. What they see and hear outside is of equal importance to what they learn within the Bank. Lagos and Saint Lucia rub shoulders and share experience with Lombard Street, Ladysmith and Liverpool, and go back to their own countries fuller and readier men as a result.

I seem to have abandoned friend Smith, whose career I was tracing, at the point where he had reached his first managerial post in East Africa at the age of round about thirty. But he still has twenty-five or thirty years of a career ahead of him. How far can he get in that time and what do we expect of him?

This is not meant to be a careers talk—it is supposed to be an account of the D.C.O.'s ideas on training. However, it must be clear that we do not expect Smith to stay in his first management for the rest of his days. This appointment is, we hope, only the first on the road. Each management is a stepping stone to the next and, above branch management, is the set up of the Local Head Offices responsible for the control of the different geographical regions of the bank's business. And above those regional offices is Head Office. There is no post on the bank's staff which is not open to Master Smith of Maidenhead.

Let me leave him and try to sum up: We, in the D.C.O., believe that the best training for an overseas banker is in the field and not in the school. But we believe that the school, both for the newly joined youngster and, later, for the man who has shown that he will make his mark, can be of enormous help in turning a banker into being a better banker. To a great extent the man must train himself but we can help him greatly by seeing that he has a wide variety of experience.

I feel that I have, in twenty minutes, only said what Francis Bacon said of Studies in eight words—

'They perfect nature and are perfected by experience.'

THE CHAIRMAN: When I heard of the thoroughness and variety of Master Smith's training from Mr. Macdona's hands, I remembered a letter which I received shortly after getting married from an uncle of mine who was equally addicted to interference and to abbreviations. He wrote to me, 'When in doubt a wise young man will always discuss things with his B. Manager'. I shall do this in future with all the more confidence having heard Mr. Macdona.

Our third speaker is Mr. Beeton, the Training Officer of the Oversea Service to which Mr. Macdona has already paid tribute. I saw in my *Times* this morning that there was a likelihood that the work of the Oversea Service would be transferred to a castle with ecclesiastical connections. So you will have no doubt that Mr. Beeton is a man of dignity and high moral tone.

The following paper was then read.

MR. BEETON'S PAPER

Training methods and systems, like all other systems, must be related to the objectives of the training and the calibre of the trainees.

Oversea Service is concerned with the impact of the industrialized West on the areas of rapid social change—areas which used to be called under-developed. Our Memorandum of Association defines our objectives as being 'to educate persons going out to appointments or holding appointments which necessitate them visiting or going to live in places overseas in the knowledge of the lands they will be entering and the races, peoples, environments, cultures, religions and civilizations they will be living among'—such education being intended to fit them as representatives of Western Christian civilization.

As regards the educational status of those who attend our courses, one can only describe this as varying from those who have completed a primary course to those with a Master's Degree. One of the first things I learned when I joined Oversea Service was that people on these varying levels can mix astonishingly

well given two things: (a) a common interest—in this case it is an interest in the region they are going to—and (b) the overriding importance of the atmosphere in which courses are held. A sixth of those who come to our courses or conferences come as the wives or fiancées of men who are going to, or on leave from, areas of rapid social change, and one has to take this fact, and the variety I have just mentioned, into account when designing courses. Private enterprise provides more than 50 per cent of those who come to our courses, but fully 40 per cent are going out in the service of an Overseas Government and Voluntary Bodies provide a small proportion also.

Our courses and conferences are residential. They are held outside London. They are short and the numbers of those attending are strictly limited. We aim at providing sufficient information on the social, political, economic and cultural background of the region for which the course is provided to enable those who are attending it to ask the right questions when they get there and to settle down quickly and usefully in their new homes. We are not concerned to teach our students their jobs. But we endeavour to adapt the programme of each course to the interests and educational standard of those who are attending it. And, because wives have so vital a part to play in the success or otherwise of their husbands' careers overseas, as well as being themselves unofficial ambassadors of the West, we devote particular attention to any wives or fiancées who attend.

To help attain the objective that those who attend our courses should be good representatives abroad of their employer and of their own background, the numbers are limited, and we never have more than 24 people at any course or conference. For a full course there are usually three members of staff, one to preside and two to act as host and hostess; and these members of staff try to create at the beginning, and to maintain throughout, an atmosphere in which inhibitions are removed, people's ideals and religious beliefs can be spoken of naturally and the objectives of the course kept constantly before the minds of those who attend. Morning or evening prayers are always held, with voluntary attendance frequently exceeding half the members of the course. For these and other reasons the residential factor is an essential part of our method. For the same reasons we ensure a reasonable standard of comfort—avoiding both luxury and austerity—in the centres where we hold courses.

Courses are of two kinds—Introductory for those who have not been in the region concerned before, and Study Conferences for those who have some experience of the region. An introductory course usually lasts for six days; a day is usually devoted to introductory matter, a couple of days to the world forces affecting the region—matters like Islam, nationalism, race, and geography—then two days to consideration of the influence of the West, leading up to what is usually the last session, one on personal relations in the students' future homes. The final day or day and a half of the course is devoted to guided discussion. In introductory courses there are usually two sessions in the morning and either two more in the rest of the day or one more session of talk and discussion and one session of films or slides. Study conferences contain fewer sessions but

appreciably more syndicated discussion. Two three-hour sessions a day occupy four days—mornings usually being devoted to some of the physical, political or economic needs of the region, and the evenings being devoted to the consideration of the effect on people of these needs being met; these conferences lead up to a guided discussion of what, as individuals, the members of the conference can do in the development of their home overseas and what are their difficulties.

There is a disadvantage in the short period that these courses and conferences occupy, and mental indigestion can occur. Our experience is that employers cannot usually spare people to attend introductory courses for more than the six days or so that they last, and we have to be constantly alive to the danger of overcrowding. A frequent comment is that the period for discussion is too short; it is usually forty minutes, after a forty-minute talk, and if one allowed longer there is the danger that questions might fall flat; and we therefore think it is better to be under high pressure than to suffer the disadvantage of members sitting facing a speaker without either having anything to say.

On the first day of a course or conference the members are divided into groups or syndicates of six, seven or eight members each, and after each talk in a session the syndicates are encouraged to meet in private for ten or fifteen minutes to decide among themselves questions that they would like the speaker to answer or the points they would like him to develop. The advantages of this method are considerable for the encouragement of discussion and the avoidance of the embarrassment that often occurs when a speaker finishes his talk and no questions are forthcoming. But we have to be careful to ensure that this method does not stifle individual questions or points of view. During the last day of a course these syndicates are asked to consider and to give their views on half a dozen questions which are drawn up so as to get the members to think out their reasons for going abroad, what they feel they are taking with them as their heritage from the West, and how, if at all, their heritage and their acquired skills can benefit emerging territories. In fact throughout the week discussion by the members of the course is as important as any other part of the course.

For the introductory courses especially we try to get speakers who can use the anecdotal rather than the academic method of delivery. They are people with current or very recent experience of the subject and region about which they are talking; and where a national point of view is likely to differ from an expatriate view, we try to ensure that the former is expressed by a national of the region under consideration. Speakers are not briefed beforehand, but if any partisan view is likely to be over-emphasized on controversial questions we try to see that the attitude of other speakers is likely to counter-balance this over-emphasis. I can recall several instances in which a most healthy reaction has occurred in the minds of our students from what they considered to be an old-fashioned or illiberal view. The limitation on the size of the course is also a very great help in encouraging good speaker-student contacts. Whenever it is possible for them to do so, our speakers stay for appreciably longer than their session; we try to get them to stay over-night and to mix freely with the members of the course; at meals there is no high table. In addition to speakers we have guests at all our

courses, including nationals of the region being considered, and this is a most useful feature. It will be seen that with sometimes three or four speakers a day, and one member of staff present for every eight students or so, there is a very high proportion of what in other circles would be called tutors to students.

At the conclusion of a course we invite students to comment on the content of the course, on the detail of it and on the speakers. Their comments, on the speakers especially, are a guide to us for the future.

In addition to providing these rather concentrated courses we are in a position to give our students introductions to mature residents in the countries to which they are going, and these we find are much appreciated. In addition, we try always to arrange for one or two past students who are on leave to visit an introductory course, to answer questions about living conditions, to show their pictures and generally to give the greenhorn the advantage of their first experience.

The results of all this are impossible to measure accurately, but one criterion is provided by the number of past students who are in regular or spasmodic correspondence with us; the proportion is over 50 per cent, which we think shows that our introductory courses have been useful and interesting; extracts from these letters are certainly of use to us and to those who attend our introductory courses. Two years ago I was bidden to lunch with a man of mature experience in Africa, who wanted to learn about the methods of Oversea Service because he found that those who had been to our courses tended to settle down much more satisfactorily than those who had not had this kind of preparation.

THE CHAIRMAN: Our last speaker, Dr. Wilson, is Adviser to the Personnel Division of Unilever Ltd. He is well equipped to discuss with us some of the sociological and psychological aspects of training for overseas posts. Before I call on him, I should like to say that I have had the pleasure of working with members of his personnel division both in this country and in Holland, and it is difficult to exaggerate the care and the thought which is given to the training of up-and-coming young men in that company. No one is setting a higher standard in this matter than Unilever and its Dutch associates.

The following paper was then read.

DR. A. T. M. WILSON'S PAPER

The scope and limits of this symposium are clearly stated in its title; but my own contribution is largely derived from the experience of an international business in which training of the kind we are discussing represents one specific case within a more complex field. This will, I hope, explain my rather general approach to our topic. It will be convenient to begin with two quotations from an address, entitled 'An International Business', given by Lord Heyworth last year at our Annual General Meeting. The first quotation made a point of considerable importance to us:

The Unilever 'expatriate' ought not to be thought of mainly as a European working in Asia or Africa, or as an Englishman or Dutchman in some European country outside Great Britain or the Netherlands. He ought also to be thought

of as an Indian in the United Kingdom, a Frenchman in Denmark, or a Norwegian in Holland. At the present time, leaving English and Dutch managers out of account, we have two hundred and twenty-five managers of twenty-one nationalities working in countries outside their own.

The final sections of his speech dealt with problems of developing managers in varying regional circumstances, and he concluded as follows:

Our experience is that the exchange of managers gives us one of the greatest assets of our business: cross-fertilization of ideas. Perhaps it does something more, too. What we are doing, or trying to do, is to build up, in the countries where we operate, management teams of able men, not men of any particular nationality or race. We are developing, we hope, a multi-national organization with a multi-national outlook. In a world where narrow nationalism is not the least nor the most distant of dangers, we think that is something worth doing.

You will recognize that this last statement represents an objective towards which we are striving, and that it bears some relation to the familiar and hopeful aphorism about 'science having no frontiers'. When, however, one comes to plan the international deployment of industrial executives or members of associated professions, many difficulties become obvious. Barriers to the free movement of men and ideas may be diminishing, but they are still of considerable importance. One might say that the prospects of arranging an optimal level of international movement of technical and professional men may be rather better than the prospects for the optimal exchange of goods in trade; but in both cases there are serious difficulties. The nature of these difficulties lies beyond our immediate subject but their existence makes clear that improved training for international service, important as this is, cannot by itself resolve the problems concerned.

Let me briefly outline what we are trying to do, in different parts of our business, to develop an international outlook among those of our managers likely to serve outside their country of upbringing. First of all, we are trying to give as good an answer as we can—by career planning and job description—to the important questions of 'recruitment for what?' and 'training for what?' Secondly, at the point of recruitment or promotion to the position of management trainee, considerable efforts are made to evaluate applicants with respect to those aspects of personality of particular relevance to international service. To take a negative point, an individual with manifest ethno-centrism or ethnic prejudice is not difficult to recognize; but in our main central recruitment scheme in Unilever an effort is made to go rather further in recognizing latent prejudice of this kind. Difficult as this is, it is rather less of a problem than might at first appear; for both general experience and special research show that the particular kind of narrowness of outlook and prejudice in judgement we are discussing will usually be expressed almost as clearly in attitude towards members of social groups of a man's own society as it will towards individual groups of other nationality and colour. If I appear to be stressing this particular point it is only because of its very great importance to the successful operation of the manager in many parts of the world. It is particularly important to recognize the difference between two things: first, a personal autocracy of outlook, which is closely associated with

ethnic prejudice, and second, professional or technical authority in carrying out a job, a quality of great importance and of an entirely different nature.

These particular aspects of selection are, of course, only part of a much wider consideration of a man's potential in both strength and development; and the whole procedure involves rather full discussions between four selectors, drawn from a continuing panel of some sixty senior executives, two external advisers who are psychologists and, on the other hand, groups of eight applicants who have reached this late stage of recruitment or promotion. In effect, this process contains an overt and accepted element of vocational guidance of almost equal weight to the element of selection; and on this dual basis attempts are made not only to evaluate an applicant as a potential manager but also to convey to him, as clearly as possible, the nature, attractions and difficulties of the career he is considering, whether this is at home or abroad. This is not an easy matter: 'abroad' is an idea which can have little realistic meaning for most young people, except in special circumstances.

The points just made emphasize the extent to which it proves almost impossible, in our multi-national organization, to regard questions of managerial structure, managerial cadres and managerial career patterns as something apart from questions of training and development. An opportunity or a difficulty which first presents itself in any one of these areas of personnel policy or practice is likely to involve action in each of the others; and this is one of the reasons for the more systematic and integrated scheme of management development which we are now introducing.

To return to the central topic of our discussion—how we try to assist people about to work in parts of the world unfamiliar to them—we provide, like most organizations, short introductory courses of an appropriate kind. In this country, as in others, we seek to avail ourselves of the excellent synoptic courses which are increasingly offered by University Institutes and Departments. We collaborate with Oversea Service, both by sending people to their courses and, like other firms, providing occasional external speakers. We try, whenever possible, to make arrangements for a family about to move to another part of the world to have considerable contact with a household which has had this experience. Here in London we provide for those about to journey overseas a medical service—in part for inoculation and immunization—whose staff have a wide range of experience. They find that health problems may still on occasion bulk large—to a degree far beyond the contemporary reality—in the minds of those facing a move to an unknown part of the world. When these problems are discussed, it transpires that they are often, quite correctly, concerned with health and adaptation to changed physiological conditions; but sometimes they are a means whereby rather different problems, of a more directly personal or social nature, may begin to be formulated and hence seek some kind of resolution. The staff of the medical service concerned with these matters have a close and continuing professional contact with colleagues in other parts of the world; and in this respect the family going abroad or coming back can pass, so to speak, along a relatively familiar and continuous network.

What I should like to emphasize is that preparatory procedures such as those outlined are of great importance, but they are not in themselves enough to provide optimal assistance or to guarantee effective re-adaptation of a manager or his household in moving from one part of the world to another. It is most certainly helpful to pick up an intellectual appreciation of the probable nature of the new situation—to get some idea of 'what it will be like'; but without actual experience of the new situation this is of limited value. To go a little further, I should say that experience, by itself, is an ineffective teacher; experience needs evaluation and assimilation. For reasons of this kind, an important complement to any home-based training is regular discussion of the actual new experiences with what, in effect, amounts to a local 'tutor', during the early phases of adaptation to a new and unfamiliar community. To some extent such adaptation may be regarded as a social apprenticeship; and like most apprenticeships, requires not only intellectual understanding but discussion of practical experience with someone who has been through the process. Those of you who are concerned with the social sciences, and particularly perhaps with anthropology, will recognize that these remarks are related to the notion of cultural relativity—as well as to the psycho-analytic view that it is important to grow up in one family and in one cultural setting rather than to attempt, so to speak, to become a cosmopolitan at too early a stage in life. Nevertheless, the way the world is going, it will be important for all of us, as early as our nature makes it possible, to accept the basic idea of cultural relativity; that is, to accept the existence—and indeed the effectiveness—of the different means by which different societies manage to achieve rather similar ends.

Let me leave these general matters for a more specific point. Provision of a brief basis of experience which would be consistent with the views just expressed was the guiding idea behind two short courses—labelled 'international'—which we recently held for young managers. In each course the twenty members were drawn, for purposes of the experiment, from various European countries; their activities on the actual course involved discussion of the contrasting ways in which similar industrial and commercial objectives were achieved in different national settings. In the same way, conferences and courses we run for executives and senior managers from many countries lay considerable stress on this same point—that is, on providing opportunities to deepen an understanding of people in various parts of the world by considering the comparable and contrasting situations of different units of our business. One aspect of these endeavours has a general character and can be very simply described: in most parts of the world the rate of change has greatly increased of recent years; and the results of even decades of managerial experience now need to be reconsidered in terms of the new context and the new frames of reference which are emerging. Considerations of this kind have led a number of the large international foundations to support interesting and important programmes of advanced study and teaching in a number of European university schools connected with contemporary developments in other continents and countries.

Let me return to our own situation in the United Kingdom for a final comment

which is almost an aside. One recent experience has suggested to me that our geographical insularity may perhaps have less effect than is sometimes thought on what is widely held to be our resistance to self-examination. Looking around for background reading for members of one of the international courses mentioned a moment ago, I had little difficulty in discovering three short works—readable, insightful and humane—which could provide for men brought up outside this country some rough idea of the main characteristics of our way of life. It was, I suppose, inevitable that of the three books concerned, two of the authors should have been of mixed Scots and Irish upbringing while the third was born in Holland and educated in France. Nevertheless, what was interesting was the difficulty in finding books of a comparable type dealing with other national communities in, so to speak, this half of the world—with the exception of the United States of America. It may be that the capacity to tolerate a slightly ironical examination of our national characteristics is more closely linked to our Anglo-Saxon heritage than others—or perhaps we ourselves—have been able to recognize.

DISCUSSION

THE CHAIRMAN: If the speakers will allow it, I should like to put to them a question from someone who cannot be here this afternoon, but who is a diligent reader of the *Journal*, in which he hopes to find the answer. If you wish to give a young man guidance on reconciling a proper pride in the country from which he comes with a due appreciation of the different culture and tradition amongst which he finds himself, how would you do it? Which of our speakers would like to tackle that one?

MR. BEETON: I believe—the phrase, I think, is Wordsworth's—that England has still got 'its precedent to teach the nations how to live'. I am rather an imperialist still about our own opinions, and I think I should try to provide an atmosphere for Mr. Smith in which the traditions of this country were easily understood, and if necessary to remind him of his own country's heritage at the same time as I introduced him (inasmuch as the time allows) to the problems of life overseas. In other words, I should encourage him not to become a denationalized person.

THE CHAIRMAN: Mr. Thomas, do you think there is any danger of people falling over backwards to avoid being men of the country from which they come in their anxiety to please and to introduce themselves overseas?

MR. THOMAS: My answer is very short: choose the right man. There is obviously a danger if you choose the wrong man, and I could not agree more with Mr. Macdonald when he said that you do not make a good man simply by training. I think if you select a man to go overseas you naturally look for qualities which reflect the best in this country's traditions. Another quality you look for is imagination, so that the man will appreciate the natural aspirations of the people in the country he is going to serve. I think that if you get the basic qualities then there is very little vocational guidance you need give. If you have not got those basic qualities I do not think you are going to make the right chap.

THE CHAIRMAN: Have you anything to add, Mr. Macdonald?

MR. MACDONALD: However well you have chosen a man I think there is a risk that, before he goes overseas, he may fall into one of two schools. He may believe that all the people with whom he will have to do business and to mix will be what the missionaries sometimes describe as 'Dear black brothers'—simple, honest,

gentle creatures of Nature, from whom one gets only simple truth. On the other hand, he may go out with some sort of a bias, or a complex about race or colour. Of course, if he has that, he should not be going out at all.

When a chap goes abroad I always try and say to him, "They are not all quite simple children of Nature, but on the other hand they are not just the hewers of wood and the drawers of water; the truth is somewhere in the middle, and for goodness sake, for six months or a year be like Brer Rabbit, 'lie low and say nothing'". Then, after about a year of non-use of your own tongue and learning to use the other chap's tongue, you may work out your own set of real values regarding the people you have got to deal with.'

DR. WILSON: The question, as I understand it, is one of giving a young man guidance. What we are looking for is a course of action which would enable him somehow to maintain his own sense of reality of the values derived from his own upbringing while freely permitting others, with a different background, to do the same thing. Although we are geographically on an island I sometimes feel that we are not the most insular of European countries from a cultural point of view. In this country—as elsewhere—the issue we are discussing has been seriously tackled by social research workers and by others, and it may be worth recalling some of their findings. For example, ethnic prejudice is almost absent in young children and is, to a large extent, an attitude acquired from older people as part of informal education. Such prejudice therefore does not of necessity have any dangerous violence behind it, unless it occurs in an individual with a particular type of personality—and this, too, has been very extensively investigated.

To turn to the main question, as an outline for a curriculum I should have thought our young man could begin at, say, 12 or 13, by taking a serious look at the strange ways of foreigners, not too long at a time, but enough to see that there are different ways of life. Later on, by the time he was 17 or 18, he could with advantage spend a longer period of time, say, a year, in another culture and in due course perhaps one other beyond that. These are obvious points—what I want to convey is that the question we are discussing is better resolved by providing appropriate experience rather than by a purely intellectual or academic approach.

On periods of time abroad, may I make one rather practical point? University exchanges—fellowships and scholarships—are normally of one or two academic years duration and there is sometimes an awkward point about the two years period. It seems probable that each one of us, if separated from our home community for more than about eighteen months, finds something rather strange can begin to happen to the internal image of home; and a good deal of rather miserable waiting for the last six months to elapse is often obvious in people on two-year fellowships. For this kind of reason the eighteen-months trip or tour is becoming a little more common.

These are very scrappy contributions, I am afraid; but the problem we have been posed is, to my mind, in no way insoluble. Let me, indeed, go to the other extreme and note (as someone has already hinted) that many of us will have seen, in and around international organizations devoted to various kinds of good works, individuals who could be described as 'imitation cosmopolitans'—people who sound empty and hollow in their relationships because they have, somehow, in their effort to become cosmopolitan, felt it necessary to abandon the background derived from their own individual upbringing, rather than integrate it in a broader point of view.

MR. A. POWIS BALE: The first speaker mentioned the importance of co-operation with the Police College and Scotland Yard. In view of what has happened in quite a lot of places in this country recently, I was surprised that Mr. Macdona did not also mention that in connection with work overseas.

MR. MACDONA: I cannot say that I have felt the need to include a course at Scotland Yard or anything like that as part of a training scheme. There is an average amount

of stick-ups and hold-ups and so on in all parts of the world, but that is common or garden thuggery. I do not think we come up against the skilled swindler very much overseas.

A MEMBER OF THE AUDIENCE: Mr. Chairman, I think the answer probably is that the police services in the Colonial territories in which Barclays Bank D.C.O. operates are so efficient that the occasion does not arise.

MR. P. N. CHAPMAN: All the discussion so far appears to have been about young men taking their initial appointments overseas. You get them young and you are able to train them and see them through until they get their appointment overseas. But a large organization sends men of 30, 35 and possibly 40 overseas who are already somewhat rooted in this country, and they have families perhaps and there are in consequence problems like the education of the children. I should like to ask the panel whether they have any experience of this sort of thing, and their method of dealing with it.

DR. WILSON: These are standard problems. Some recent changes in tackling them stem from increasing acceptance of the principle that, with respect to overseas posts, the family is the employment unit. Where that principle is accepted a number of things follow—for example, less uneasiness over being liberal with respect to household allowances and travel expenses. There remains of course the difficulty that there is not as yet throughout the world an adequate choice of formal educational facilities. If there were, life would be simpler for expatriate families. In that connection let me say that with the development of professional aspects of management—with the emergence of a professional manager as contrasted with the owner/manager of years gone by—the newer type of manager in industry and commerce is, in my experience, increasingly concerned with his family as well as with his job.

A second major factor in this field is the development of cheaper methods of travel, which have led to easier movement across the world.

The end result of these changes is that the family is more fully accepted as the employment unit; that maintenance of the unity of the family is more fully accepted; that the needs of the manager to educate his children are accepted—all, so to speak as natural rights and not as acts of grace. On this basis quite different personnel policies have grown up of recent years.

MR. A. B. VACHELL (Secretary, Welfare Insurance Co. Ltd.): I am associated with an organization which is having increasing difficulty in recruiting staff for India, Pakistan, Ceylon and Africa amongst educated young men in this country. I should very much like to know if this is a common experience.

MR. MACDONA: The position is easier now than it was a few years ago. In my experience, 5, 6 or 7 years ago it seemed that the youth of Britain no longer wanted to go abroad. I put a lot of that down to the influence of 'Mum'. At the end of the war, 'Mum' had had her menfolk away for years, and she was not going to have it happening again. So we noticed for some years after the war that it was difficult to get people to accept the idea of going abroad—except, of course, those optimists, who thought they could 'join Mr. Barclay and see the world', and come back in a couple of years' time and settle down to something nice at Midhurst or Petersfield. But that attitude has changed a lot; now it is possible to be very much more 'choosy' than one could be perhaps six or seven years ago.

MR. D. G. STRADLING (John Laing & Son Ltd.): I should like to ask Dr. Wilson to elaborate a little on his statement that something happens to people who go overseas for eighteen months plus. We in the Contracting industry are faced with the problem of people going overseas on contracts of eighteen months-plus duration. Should we anticipate something difficult happening, and if so what can we do about it?

DR. WILSON: Let me tell you how the point of view I expressed came into being. Towards the end of the war it was possible to get interesting data from our armies moving up the Italian peninsula—figures dealing with the incidence of what we called the morale indicators—military ‘crime’ and certain other things, for example, malaria, since in those circumstances getting malaria to a considerable extent depended on whether a man was in a frame of mind to take precautions or not. Figures were obtained on the rates per thousand men, of these ‘morale indicators’ in large military formations, living under almost identical conditions, but made up of men who had been overseas for varying periods of time—six months, twelve months, eighteen months, twenty-four months, and so on. The indicator figures rose rather gently for the first two periods of six months, and then began to increase sharply so that in men who had been eighteen months or more overseas the rates per thousand were more than twice what would have been expected. This phenomenon was, we discovered, well known to members of colonial or other overseas services in the pre-war years. Regular army officers, for example, recognized that a time factor of this order was not unfamiliar. It looks, then, as if we are more like plants than we think, in that we seem to need roots of some kind.

May I comment on one difficult situation which sometimes arises in the same connection? In some parts of the world expatriate groups devote themselves to forming clubs which—to be brief—may be described as shrines for the worship of the home society. One purpose of these clubs—no doubt there were others—was often to offset the problem we are now discussing—to hold, so to speak, commemorative services to keep alive, in the minds of the club members, the image of the home society. It is only too easy to see how this could be misinterpreted in situations of political tension and social change.

MR. PHILIP BROADBENT (Joint East & Central African Boards): So far the panel have been discussing the wonderful facilities that there are for the training of government officials and bankers, and for the higher posts in these foreign countries. Would they say something about the problem of the mass of bricklayers, artisans, railway men and others who go abroad? A hundred or so contractor’s labourers, for example, may suddenly find themselves in these territories. Two Ministers from the Federation of Rhodesia and Nyasaland who were over here this year blamed the so-called ethnic prejudice on that type of emigrant from this country.

MR. BEETON: That is a very important class. I myself think it is the most influential, in the matter of race relations, of the classes who leave this country to work abroad. It is extremely important that men (and women) like that should have their minds widened before they go out to think (a) about what they are taking with them, what goes to make them, what is their heritage; and (b) about the territories they are going to, and if possible to be inspired before they go to make a good impression, to get on well with the local people. Very little is done. Civil engineering contractors get urgent contracts and are anxious to get their staff abroad as quickly as possible. I do not think there is nearly enough preparation, and although I see the difficulties of the civil engineering contractors, something must be done if this country’s relations with other countries are to remain good.

THE CHAIRMAN: Mr. Sanderson, you have a lot to do with the recruiting of men for posts abroad. I wonder whether you will be kind enough to tell us some of the questions you put to these men to try to make sure before they go that they are likely to settle down?

MR. L. H. F. SANDERSON (I.C.I. Ltd.): One of the questions which I always put is about the attitude of the wife. If a man who is a candidate says in answer to the question, ‘What does your wife think about it?’, ‘We have not talked about it much but I will talk her into it’—I immediately say, ‘Good morning’.

Another very important problem which has already been touched upon by a member

of our panel is the question of education. You are going to add very much to your success in overseas recruitment in a territory if you can hold out some facilities, financial or otherwise, for suitable education. Contrary to what Mr. Macdona told us earlier, I have not found in the last few years that there is any great increase in desire to go abroad. I feel that the draw of the Welfare State is still strong. One part of that attraction lies in the medical service. Very often people are unwilling to go abroad because the financial-medical arrangements for themselves and their families will not be as satisfactory as they are in this country.

MR. T. J. ROBERTS (Beecham Group Ltd.): I should like to ask Dr. Wilson if he would elaborate on that very interesting concept which he called 'a new social apprenticeship'. He implied that it is possible to detect even latent ethnic prejudice in applicants; but is it not possible that when they get abroad they might find themselves subjected to such pressures, and that they might unwittingly imbibe attitudes from other expatriates which will put them in an intolerable position?

Dr. Wilson also implied that provision is being made somewhere or other (perhaps in his own company) to facilitate this new social apprenticeship by discussing with other people and trying to evaluate their new experiences in the here and now, so to speak, as they are actually happening. Could he tell us a little more about that?

DR. WILSON: To take the last point first, I think this can happen almost automatically. For example, in some of our units the need for such help is formally accepted, so that, for example, a manager's wife with considerable knowledge of a particular part of the West Coast of Africa will, in fact, be 'appointed' in the rôle of adviser to incoming households.

On the 'social apprenticeship' idea, in terms of the sociological and psychological theories which I find useful, growing-up is regarded as a social apprenticeship in which learning takes place in the here-and-now relationships with parents and other children within the family. What is learned in this relatively specific situation is then revamped in a broader sense within, for example, the peer group at school; and indeed one moves in a similar way from group to group throughout life. In this sense going abroad is simply learning to live in one more group; and it may present less difficulty to some people than a move within their own national community.

Let me add a few words about latent prejudice. In the formation and development of ethnic attitudes—attitudes to strangers and foreigners—there are, indeed, cultural factors which are to a considerable extent independent of characteristics of personality. For example, I know a man who confesses himself as ethnically prejudiced but who is in himself a gentle and tolerant person by all external signs. Of his prejudice he says, 'I find it is almost like a conditioned reflex, only to be controlled with difficulty'. He knows that his attitude is unreasonable—indeed futile,—and he has, indeed, learned to control it. It does little harm, therefore, except to present him with an unnecessary task. Where, however, you have individuals with a combination of a particular type of personality exposed to strong cultural influences towards ethnic prejudice then something dangerous can certainly build up. One last word on this: it seems to me of great importance to make every effort to understand these matters. For it is not merely playing with words, to say that prejudice against those who have prejudice may in itself be an equally narrow attitude of mind.

THE CHAIRMAN: I think we have been fortunate to have had the opportunity to benefit from the experience that each of our speakers has had, and by their great variety of approach to these problems. This has been a notable day in the history of this Society, which as our opening speaker pointed out, has a long tradition of interest in education at home and abroad. We thank you all most warmly.

The vote of thanks to the speakers was carried with acclamation, and the meeting then ended.

MODERN DYES

The Sir William Jackson Pope Memorial Lecture by

CLIFFORD PAINE, B.Sc., F.R.I.C.,

*a Director, Imperial Chemical Industries Ltd., delivered
to the Society on Wednesday, 3rd February, 1960, with
Sir Ernest Goodale, C.B.E., a Vice-President of the
Society, in the Chair*

THE CHAIRMAN: As Professor Dodds, who was to have taken the Chair this afternoon, is indisposed, I am deputizing for him and I am very privileged to do so. This is the tenth lecture in memory of the late Sir William Pope, and our lecturer this afternoon carries on the great tradition already established by the distinguished lecturers who have delivered the previous lectures. Mr. Clifford Paine is a Fellow and Vice-President of the Royal Institute of Chemistry, and a Fellow of the Society of Dyers and Colourists, of which he was President from 1956 to 1958. At that time we met in planning the celebrations for the centenary of William Perkin's discovery of the first synthetic dyestuff. If I may be permitted to say so, our lecturer is one of those who have made a great name for themselves from small beginnings, because he joined I.C.I. in 1917 as a laboratory assistant, and after going through various stages he became Chairman of the Dyestuffs Division in Manchester in 1952. Three years later he was appointed to the I.C.I. main Board of which, of course, he is still a member, and in charge of fibres and heavy organics.

The following lecture, which was illustrated by lantern slides and experiments, was then delivered.

THE LECTURE

The contemporary palette of synthetic dyes provides a comprehensive range of shades and properties which make them suitable for a wide diversity of uses. Indeed, where a particular combination of shade and properties is required for a specific purpose there is usually freedom of choice among several candidates. There are currently two to three thousand commercially useful dyes, of which some two hundred or so can be said to be of major importance by virtue of unique shades or outstanding properties.

Underlying this profusion of colour is an intricate and fascinating pattern of organic chemistry. Nevertheless, it is not my intention to deal comprehensively and in detail with the chemistry of modern dyes. It seemed to me that it might be more appropriate to examine the emergence of certain general concepts about the structure and behaviour of dyes and the impact of these concepts on modern dyeing technology. We can then consider in more detail a few modern dyes which embody some of the general concepts we have elucidated.

We are just past the centenary of Perkin's discovery of Mauveine, the first synthetic dyestuff. It would therefore be reasonable to expect that within the last quarter of that century, say since the death of Sir William Pope whose

memory we honour to-day, most of what is modern in concept and practice is to be found. Whilst this is so, it is necessary to look farther back in history in order to see how modern practice has evolved.

The dyes which are of major importance to the modern dyer are not all of recent discovery. Indanthrone, a blue dyestuff of outstanding fastness to light, was discovered and commercialized as early as 1901 and is still of prime importance. On the other hand, the so called reactive dyes which embody new principles and which are rapidly becoming major products have only been discovered within the last four or five years.

May I remind you that Perkin and his near contemporaries were exercised about two entirely different but related problems. First, they were searching feverishly for new chemical reactions capable of producing coloured substances in shades more diverse than the original mauve. Secondly, they were looking for methods of applying such colouring matters to textile fibres. That is, they were concerned with the dyeing process as such. By 1880 the discovery of the azo dyes had widened the range of available shades to include yellow, orange and scarlets, thus extending the dyers' palette beyond the blues and magentas of the earliest synthetic dyes. Almost all the dyes discovered in the second half of the last century could be dyed on silk or wool with relative ease from a water solution in presence of a small amount of acid. The emergence of the azo dyes in particular had a most profound effect on the future of wool dyeing. It came to be recognized that the sulphonic acid group which was a feature even of the early azo dyes conferred not only water-solubility on the dye but also considerably enhanced the affinity of the dye for the wool fibre. The dyeing of cotton was, however, a much more difficult problem. All the early dyes had no direct affinity for the cotton fibre. They could only be fixed on cotton by metallic salts, tannic acid, and other devices designed to precipitate the dye in a water-insoluble form within the fibre. These were devices which had previously been used in order to fix the natural vegetable dyes and also for producing colourations on fibres by the use of mineral pigments. Ideas about synthetic dyes for the dyeing of cotton were revolutionized by the discovery of Congo Red in 1884. It was found that this particular water-soluble azo dye had the unique property of transferring itself from the aqueous dye bath to the cotton fibre and becoming firmly fixed there by the simple addition of common salt to the dye bath. Largely by trial and error, other dyestuff structures were found which also had this desirable property of direct affinity for cellulose.

Thus by the turn of the century it was recognized that the chemical structure of a dye had an important bearing on whether that dye would have a preferential affinity for animal fibres on the one hand or cellulosic fibres on the other. Rough generalizations about these structural relationships were made but it was not really until the 1930s that underlying causes of dyestuff affinity for fibres were studied in a quantitative way. This involved a study of dyeing as a physico-chemical mechanism; of how the dye transferred itself from water to the fibre surface and how the dye then moved within the fibre. These investigations were undoubtedly stimulated by the increasing knowledge of the structure of the

natural fibres following the development of X-ray techniques. An additional stimulus to probe these problems of structure and affinity arose from the commercial development of cellulose acetate fibre after the First World War. It had been a shock to find that with few exceptions the vast array of available commercial dyes, admirable enough on natural fibres, just would not dye cellulose acetate at all. The practical solution of dyeing cellulose acetate not only heightened speculation about the nature of dye affinity, but it also had a major influence on modern technology in other respects, as I hope to show.

There are one or two other points we must look at retrospectively. I have already referred to the discovery of Indanthrone in 1901. This blue dyestuff was found to have such outstanding fastness both to light and to washing that it set up completely new standards of performance against which the new dyes of the future would have to measure. This so-called 'vat dye' had, however, offsetting disadvantages. Indanthrone is virtually insoluble in water and cannot be dyed in any of the usual ways. It can be reduced or 'vatted' by sodium hydro-sulphite or similar reducing agents to give a water-soluble derivative which has a modest affinity for cotton. This water-soluble derivative can therefore be applied to cotton from an aqueous dyebath and then the parent, blue Indanthrone, can be regenerated within the cellulose fibre by re-oxidation. Thus, Indanthrone can be dyed in a practical manner but by a multi-stage process and with a measure of inconvenience.

Modern vat dyes now cover a wide range of shades with fastness properties approaching those of Indanthrone. The criteria required of a modern vat dye are that it shall be easily 'vatted' or reduced, that the reduction products shall have a good solubility in water and a good affinity for cellulose. As evidence of a classical education the chemist calls these reduction products 'leuco compounds'. They are almost all highly coloured. Numerous vat dyes (for example, Caledon Jade Green) are of permanent importance in the modern dyers' armoury, colour fastness and attractive shades outweighing in some measure the inconvenience of their method of application.

From time immemorial the dyers' preferred medium has been water. It is cheap, plentiful and convenient to handle. It is clear that the economics of dyeing will be most favourable with a dye which is readily soluble in water and yet will transfer from the water and fix itself on the fibre in one operation by modest applications of heat or by simple adjuvants. The early direct dyes, such as Congo Red, fulfilled these criteria admirably but nevertheless suffered from being relatively fugitive to light and only having moderate fastness to washing. There has therefore been a considerable urge to develop direct dyes with easy application and yet with fastness properties approximating more nearly to the vat dyes. Much success has been achieved. Considerable increase in light fastness has been brought about by the use of dyes containing copper or chromium to which reference is made later. Also, by careful attention to structural detail dyes with high intrinsic affinity have been obtained, with consequent improvement in standards of washing fastness. The modern dye chemist, however, has not been content to use higher direct affinity where the higher standards of

washing fastness were required. The direct dyeing operation is to a greater or less extent reversible. At the end of dyeing there may be a state of equilibrium between colour in the dyebath solution and colour affixed to the fibre. If then the dyed fibre is removed to a bath of clean water, then there is a tendency for a new equilibrium to be established with consequent loss of colour from the fibre; that is, washing fastness is by no means absolute. The possibility of producing a water-insoluble colouring matter within the fibre by first presenting it to the fibre in an intermediate and temporary soluble form has been a common concept. Indanthrone and its leuco compound, as we have seen, were particular embodiments of this concept, but many other variations on this theme have been used and several methods are common in modern practice. A related method of achieving high standard of wet fastness is to synthesize a water-insoluble dye within the fibre itself from its intermediate components. For example, by soaking cotton fibre in an aqueous solution of a suitable naphthol or phenol and then reacting on this with a suitable diazonium solution, a water-insoluble azo pigment is produced within the interstices of the fibre itself. These are the so-called azoic dyes which are used particularly for the colouring of cotton yarns and fabrics where a high standard of washing is required—for example, in woven or striped towellings. A range of suitable components is commercially available and a wide range of shades can be produced by this method.

To recapitulate briefly, in the search for modern dyes some of the principal desiderata which have guided research are:

(1) To retain easy methods of application, preferably the use of simple aqueous solutions.

(2) To achieve the standards of fastness, particularly light fastness, of the better vat dyes, but preferably with simpler methods of application.

(3) To achieve high standards of wet fastness, that is washing fastness, by attaining irreversibility of the dyeing mechanism either through exceptional dye to fibre affinity or forming a water-insoluble colouring matter within the fibre—for example, through the medium of a temporary water-soluble derivative of easy application.

(4) To design dyestuff structures with a high intrinsic affinity for specific fibres—initially, for the natural fibres and cellulose acetate rayon but later for the man-made synthetic fibres.

With this as a background we can now examine one or two important kinds of modern dyestuff which fulfil many of these basic requirements. I propose to begin with the so-called dispersed dyes which were designed in the first instance for the purpose of dyeing cellulose acetate. Earlier I reminded you that when cellulose acetate rayon was first commercially developed between the two wars it was found that the dyes available for use on natural fibres were of little or no value for colouring this new synthetic fibre. It became evident that a high degree of water-solubility, particularly that arising from the presence of a multiplicity of sulphonic or carboxylic groups, militated against any worthwhile affinity for cellulose acetate fibres. It was found that affinity was to be looked for among coloured compounds which were water-insoluble and which had a molecular

size rather less than the conventional dyes for natural fibres, and that affinity was increased by the presence of amino or substituted amino groups. Suitable colouring matters were found amongst the simpler azo compounds and among some of the highly-coloured amino anthraquinone derivatives. Most of these had a ready solubility in solvents such as acetone and, indeed, the dyeing of cellulose acetate can be somewhat crudely considered as dissolving a coloured organic compound in cellulose acetate as an organic solvent. Such dyes, if water were to be used as the carrier medium, could only be applied as an insoluble suspension. It became a technological problem to produce these dyes in an extremely fine state of sub-division and to preserve the original small particle size from aggregation by the incorporation of suitable surface active agents and protective colloids. Finally, the dry powder so produced must disperse rapidly in an aqueous bath to give a uniform dispersion or suspension. So highly have these physico-chemical techniques been developed that modern dyes of this class, the so-called disperse dyes, give uniform suspensions which in some cases might well be mistaken by the casual observer for true solutions. In short, they have come near to the basic desideratum of the ease of application of the truly soluble dyes.

The dispersed dyes are, if anything, of enhanced importance to-day because of their usefulness in dyeing some of the modern synthetic fibres such as nylon and 'Terylene'. The tight physical structure of these so-called hydrophobic fibres makes them difficult to dye. In other words, the underlying cause of the desirable drip-dry properties of such fibres at the same time makes difficult the penetration of aqueous dye solutions and restricts the migration of dye molecules within the fibre.

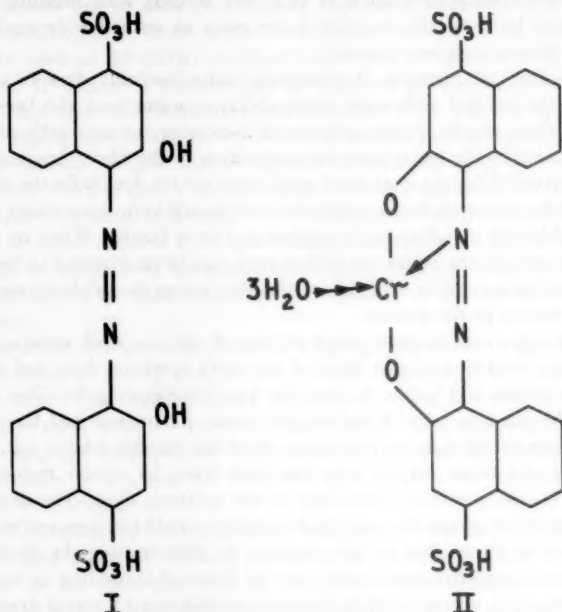
The techniques applied for producing the dispersed dyes in a suitable physical form have had other far-reaching effects on the dyeing of synthetic fibres, in particular on the dyeing of viscose rayon. We have already considered the possibility of producing a water-insoluble colouring matter or pigment within a fibre. We have postulated that fibres dyed in this way should have a high standard of washing fastness. In the case of synthetic fibres which are made by forcing a solution or molten mass of polymer through fine holes in a spinnerette, it is a short step in reasoning to contemplate pigmenting or colouring the polymer mass before it is squeezed through the spinnerette. This technique, which is a logical development of the work on the affinity of insoluble dyes for cellulose acetate, is now practised on a considerable scale. To pigment synthetic fibres before spinning, the so-called 'mass colouration' of fibres, requires extremely fine dispersions of pigment so as to obtain the maximum tinctorial effect and, also, to avoid any risk of blocking the extremely small holes of the modern spinnerette. This technique has become of importance in the modern colouration of viscose rayon. The limitations of the method are more commercial than technical. Many fashion shades change from season to season and in some years pale shades are more fashionable than heavy shades. Clearly the problem of producing mass-coloured fibre without risk of obsolete stock is more difficult than if one manufactures white yarn or fabric and then dyes the appropriate shade according

to demand at the time. Nevertheless, there are shades for which there is a permanent and regular demand—for example, black and navy blues. It is in these cases where mass pigmentation scores both on the grounds of cost and, naturally, of wet fastness. Thus, in this context, carbon black has now become an important modern 'dye'! A similar technique has found a small but useful decorative outlet in the mass-pigmentation of polyester threads with metallic powders. The metallic lustre of the resulting yarns gives an attractive decorative effect in woven fabrics such as curtains.

Physico-chemical methods of producing water-insoluble dyes in extremely small particle size and with ready dispersibility in water have also been applied to the vat dyes, mainly for the purpose of increasing the ease with which they can be 'vatted' to the leuco form for application to the fibre. Another modern device for simplifying the method of application for vat dyes is for the dye maker to convert the colourless leuco compound into its sulphuric ester which is readily water-soluble and therefore easily applied to cotton fabrics. When on the fibre these ester compounds, which are sold as such, can be reconverted to the original water-insoluble vat dye by oxidation on the fibre, losing the sulphuric ester water-soluble grouping in the process.

Another important modern group is that of the so-called metal-containing dyes. I have already said that most of the early synthetic dyes had no direct affinity for cotton and had to be used by first impregnating the fibre or fabric with suitable metallic salts. These metallic salts or mordants had the ability to fix the dye on the fibre in the form of an insoluble metallic lake or salt. Madder or alizarine and other natural dyes had been fixed by similar techniques for centuries. It was later found that some of the synthetic dyes, even those which already had direct affinity for, say, wool or cotton, could be improved in washing fastness and in some cases in light fastness by after-treating the dyeings with solutions of appropriate metal salts such as those of chromium or copper. In general, chromium was found to be the most suitable metal for wool dyes whereas copper was generally more satisfactory with cotton dyes. It is evident that such methods involving a two-step operation in which metal treatment and dyeing are two separate processes are at a disadvantage in both cost and convenience. There is a further disadvantage. When the metallic lake is formed the dye undergoes considerable change of shade, usually a deepening of shade—for example, from bluish-red to blue or from yellow to orange or brown. Such changes make precise colour matching of dyeings from batch to batch more difficult. To overcome these disadvantages it became necessary to invent dyes with the metal already firmly fixed; that is, with the fastness properties and the change of shade already in-built and yet with enough direct affinity for the fibre to enable them to be dyed in a normal way from an aqueous bath. The achievement of this objective has been by no means simple, and the modern metal-containing dyes have indeed been evolving as a range during the last thirty years. The most important members of the metal-containing dyes are those in which the chromophore, or colour-producing structure, is the azo link. It was found that by building certain molecular groups around the azo link to give a claw-like

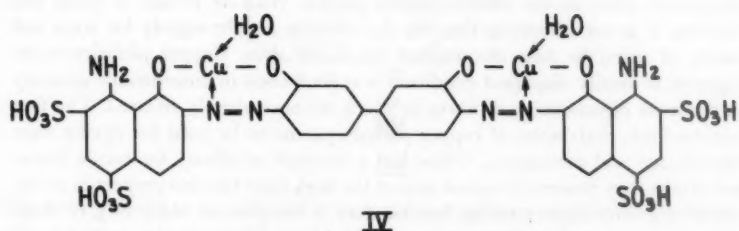
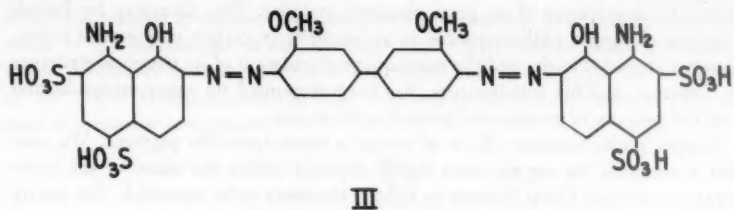
or 'chelate' structure capable of grappling to it a suitable metal atom, the whole dye molecule is given a greater strength and rigidity and the azo link given greater protection against disintegration by light or oxidation. One of the commonest 'chelate' systems is the ortho-dihydroxy azo structure—for example, (I)—which is capable of co-ordinating or gripping firmly chromium as in (II).



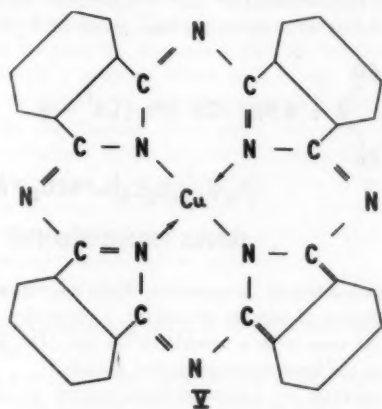
In certain cases ortho dimethoxy azo groupings can similarly be converted to co-ordination forms—for example, (III) can be converted by the dye maker into (IV).

Thus a blue dyestuff (III) discovered in the 1890s, which is too fugitive to light for many modern purposes, has now taken a new lease of life in modern practice as form (IV) which has a very high fastness to light.

Improvement in fastness properties of dyes for wool dyeing has not only been achieved by the use of metal compounds. A very marked improvement in washing fastness of wool dyes was achieved by an invention in 1933 which was undoubtedly influenced by the emerging chemistry of synthetic detergents. It was found, particularly in azo dyes, that by introducing long fatty chains into the dye molecule at the same time as water-solubilizing groups such as sulphonic acid groups it was possible to strike an advantageous balance of properties. That is, a balance between the solubility required for easy dyeing and the colloidal behaviour of the dye once within the fibre which made it more difficult to remove by water.



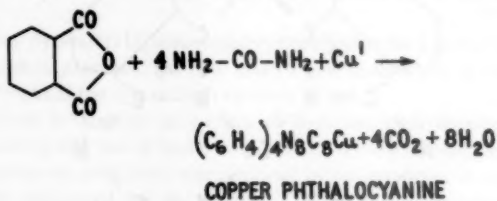
It is not often that a completely new chromophore, or source of chemical colour, turns up. The discovery of copper phthalocyanine in the 1930s would, therefore, have been notable on this ground alone. The recognition of its structural family relationship with haemin, the red pigment of blood, enhanced its scientific interest. However, we are primarily concerned to-day with the importance of the phthalocyanines in modern dye technology. This importance derives not only from an attractive shade but in particular from outstanding fastness properties. The ability of copper phthalocyanine to sublime unchanged



at 600°C. is evidence of its great chemical stability. The discovery by British chemists of copper phthalocyanine as an impurity in certain commercial manufactures of phthalimide, and the subsequent elucidation of its chemical structure by Linstead and his collaborators, has been recounted on many occasions and I do not propose to go over that ground again to-day.

Copper phthalocyanine (V) is of course a water-insoluble pigment. We note that it contains the copper atom firmly chelated within the claws of the outer organic structure. Great fastness to light is therefore to be expected. The purity of its blue shade, neither too red nor too green, makes it the blue component of choice for modern three-colour printing systems. It is the only modern pigment with fastness comparable to the metallic oxides and hence to find a permanent place on the modern artist's palette. With its virtues of shade and fastness, it is not surprising that the dye chemist sought eagerly for ways and means of using the new chromophore for textile dyes. Copper phthalocyanine pigment in finally dispersed condition is indeed used in considerable quantity in the mass pigmentation of fibres to which we have already referred. The first water-soluble derivatives of copper phthalocyanine to be used for dyeing were disulphonic acid derivatives. These had a measure of affinity for textile fibres, and whilst they preserved a good deal of the high light fastness properties of the parent pigment, their washing fastness was of too low an order to give them permanent importance. However, a considerable step forward was made in 1947 when Haddock and Wood discovered that certain quaternary ammonium derivatives of copper phthalocyanine had water-solubility and affinity for cellulose fibres. Most important of all, these derivatives readily regenerate a water-insoluble copper phthalocyanine within the fibre, thus preserving at one stroke ease of application and high fastness properties.

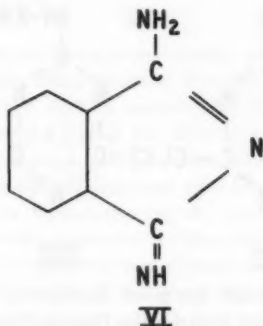
The most important technical process for the manufacture of copper phthalocyanine is that invented by Wyler after the constitution of the compound became known. The process consists in heating together phthalic anhydride, urea and a copper salt. Having considered the complicated structure of copper phthalocyanine (V), let us write down the bare bones of Wyler's reaction:



For sheer elegance and chemical imagination Wyler's invention, in my opinion, stands in the upper flights of organic chemistry. I remember a colleague of his and mine saying at the time with a twinkle in his eye, 'Dr. Wyler, what a pity that you have to waste the four moles of carbon dioxide!'

The remarkable reactions by which phthalocyanines are formed have been

of intense interest to organic chemists from the beginning. Much study has been made of the mechanism of the reaction, particularly with a view to isolating stable precursors or intermediates in the overall reaction. In 1956 the chemists of the Bayer Company showed that 1-amino-3-imino isoindolenine (VI) is such a precursor compound:



It is stable enough to be marketed as such and is capable by appropriate treatment with a copper salt on the fibre of producing the parent copper phthalocyanine pigment within the fibre.

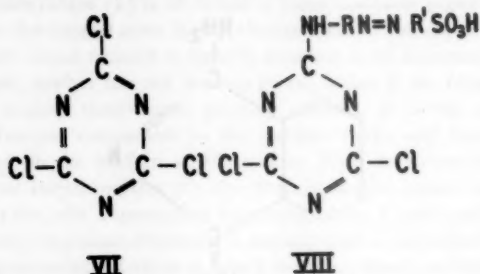
All the cases of modern dyes we have discussed so far depend for their attachment to fibres on either (a) physical absorption involving some measure of chemical affinity for the fibre, or (b) mere mechanical retention of insoluble particles of colouring matter within the fibre itself. A third method of attaching dye to fibre has always been the dye chemists' dream—namely, to do this by actual chemical reaction between dye and fibre. In such circumstances the dye would become chemically part of the fibre itself and it could be postulated with certainty that such a covalent link would give a substantial increase in the washing fastness of the coloured material. There have been several abortive attempts to solve this problem in the past, but it is only within the last four years that British chemists have produced a solution which is not only technically practicable but which has already become of major technical importance. The first useful dyes of this kind are the Procion dyes, which are particularly suited to the dyeing of cotton or cellulosic fibres. The Procion dyes are freely water-soluble and can be applied to cellulose from a normal dyebath. Then, under very mildly alkaline conditions in the same bath, the dye reacts with the cellulose so that it is no longer either water-soluble or extractable from the fibre by a wide range of solvents. The generalized reaction can be written so:



where S is a water-solubilizing group, R is the colour structure and X is a reactive halogen atom.

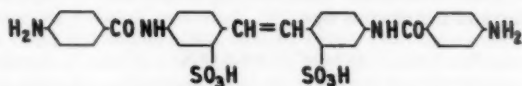
Perhaps I might exemplify the principle in a little more detail. Cyanuric chloride (VII) has three reactive chlorine groups which can be made to react

singly and in turn with, for example, amino compounds such as coloured amino azo compounds (VIII). If the amino azo residue in (VIII) contains a sulphonic acid group or groups (VIII) it will indeed be a water-soluble reactive dye, since the two remaining chlorine atoms in the cyanuric ring are capable of reacting with cellulose under mildly alkaline conditions.



My colleague, Dr. Vickerstaff, has given elsewhere in great detail the evidence for actual chemical reaction between the Procion dyes and cellulose but, apart from saying that this evidence is undoubtedly substantial, I do not propose to deal with it to-day. There can be no doubt that Procion dyes are extremely easy to apply; their fixation is very rapid and the finished dyeings have fastness to washing comparable with that of many of the vat dyes. It is already clear that the underlying principle of reactive dyes has been by no means fully exploited. Indeed, within the last year a new range of dyes involving the reactive principle has been designed specifically for use on nylon. These represent a substantial step forward in the special problem of dyeing the more recent man-made fibres and especially of achieving high washing fastness. I have said very little about the problems of dyeing polyamide, polyester and polyacrylonitrile fibres except to indicate that the physical structure which gives them many of their desirable textile qualities at the same time makes them more difficult to dye than the natural fibres. However, they can be satisfactorily dyed under commercial conditions although the dyer would undoubtedly welcome simplified methods of application and a greater versatility of available dyes. In this region the modern dye picture is by no means complete, but I have not the slightest doubt that chemists will in due time produce improved dyes either by further development of the concepts we have already discussed or by discovering yet new basic principles.

Perhaps I may be allowed to touch briefly upon a minor development in modern dye technology because of its personal interest to me and because it has some relevance to what I have said during the course of this lecture on the subject of direct affinity for cotton. In the early 1930s I was much concerned with both experiment and speculation about the structural principles which confer substantivity or direct affinity for cotton, particularly molecular size and shape of substantive dyes. Partly to confirm certain theoretical conclusions I made compounds of the following kind:



IX

Compound (IX) is soluble in water, it is virtually colourless and 'dyes' cotton direct just like an ordinary direct dyestuff. I reported that under ultra-violet light the colourless 'dyeings' had an intense blue fluorescence. Apart from a few minor uses the compound had at the time no great practical significance. A few years later it was proposed to improve the whiteness of laundered fabrics by treating them not with the old-fashioned blue bag but with colourless compounds which had a blue fluorescence in the near ultra-violet. Compounds such as methyl umbelliferone were tried for this purpose but were found to be of limited practical value because they had virtually no affinity for cotton. It was then that the compounds in which I had previously been so interested became of technical and commercial importance. Since then many variations on the original structure have been made in order to produce various improvements in properties, such as freedom from yellowing on exposure to light, and also for the purposes of increasing the intensity of fluorescence. Fluorescent whitening agents have become an established feature in both laundry practice and detergent manufacture. It is therefore interesting to recall that these modern embodiments derive from an attempt to make some fundamental study of cotton affinity.

Time is not available to give a picture of the ingenious ways in which the dyer and the fabric designer use the modern dyes available to them, nor of modern high speed, continuous dyeing processes. Reference must be made, however, to one practical aspect of the selective affinity of a particular dye for a particular fibre. The fabric designer, either for economy or for a new aesthetic effect, may blend or weave together two or more different fibres. With a mixture of selective dyes of different colour the dyer can obtain a two- or three-shade effect from one dye bath. If the selective dyes are of the same colour, a uniform or 'solid' shade can be produced from one dye bath.

In conclusion, it is appropriate to recall that Sir William Pope along with others was deeply concerned during the First World War at the extent to which British industrial organic chemistry, and dye chemistry in particular, had fallen behind that of the Germans—to recall also his researches on the cyanine dyes designed to rectify the appalling weaknesses of our national situation on photographic sensitizers. The cause of all those British deficiencies was simply that we had not devoted enough money and effort to industrial organic chemical research. That situation has been radically altered since the First World War, although there is still no room for complacency. Nevertheless, Sir William would have taken pleasure in the fact that of five or six major discoveries made in the field of dyestuffs technology since the First World War, some four of these can be credited to British chemists—I think particularly of the outstanding vat

dye, Caledon Jade Green, the dispersed dyes for cellulose acetate, copper phthalocyanine, and the reactive dyes.

DISCUSSION

THE CHAIRMAN: I am sure you will all agree with me that the lecture we have just heard and, indeed, seen, was a very worthy memorial to Sir William Pope. We are very grateful to Mr. Paine for dealing so clearly and thoroughly with what, to me, is a very abstruse subject.

Mr. Paine referred to those who have assisted in the development of the British dyestuff industry since the beginning of the First World War. I should like to add the name of Sir James Morton, who as a practical textile dyer did a great deal towards assisting the development of a British dyestuffs industry at that time. Since his death the subject has gone a great deal further, and I imagine to-day the industry would be almost unrecognizable to him.

MR. A. POWIS BALE: The lecturer mentioned that we lagged behind some other countries in dyeing. My particular interest is the dye in tent canvas, and the use of dyed tent canvas. They started sending over this canvas in the shape of tents and so forth, in very nice bright colours, and it is only in this last year that our tent manufacturers have really got busy. Is it our people who make the canvas or similar material who are at fault, or are they hesitating to use these dyes because they reduce the length of life? Tent canvas has a very strenuous existence, and it strikes me that some of these dyes may have an adverse effect on the length of its life. I should like to ask the lecturer whether that is correct or not?

THE LECTURER: My knowledge of tent canvas is virtually nil, but I offer the following comments. First of all, there should be no greater difficulty in achieving the highest standards of light fastness on tent canvas than on any other textile. I cannot see why the application of the dyes of the appropriate fastness should lower the physical properties of the fabric in any way. The dyer can apply his own specifications for dyes in this regard and it is not unusual for him to make comparative measurements of the tensile properties of a fabric before and after dyeing.

MR. P. K. SHAHANI: Does the chemical structure of fibres like jute have affinity to any of the modern dyes?

THE LECTURER: Existing dyes with an affinity for cellulosic fibres will certainly dye jute under appropriate conditions. Jute for bagging has been dyed for many years, usually with the cheapest direct dyes. Since colouration in this case is for temporary identification of particular bags and their contents, high standards of fastness are not required.

MR. H. A. BRASSARD: Would the lecturer comment on the possibility that food given say to the sheep, or colours given to the earth when growing fibres, may produce in those fibres a constitution of reasonable fastness. I should like to add the comment that tomorrow people might well say that to use dye in water was very strange.

THE LECTURER: This proposal has some relationship to the mass colouration of viscose, but even if it were practicable it would be unattractive. First one would have to decide how many sheep were to be fed with product X in order to get an appropriate world stock of the resulting colour. To do this and keep all stocks separate and to process the different shades of raw wool separately would be hopelessly uneconomic.

MR. J. LLOYD OWEN: Many years ago the phrenologists thought they could ascribe a man's good or bad qualities to the 'bumps' on his head. In the same way the first theory of colour in dyes was a phrenological theory: colour was ascribed to bumps on the molecule! We were told to look out for 'chromophores'—azo, imino, carbonyl

groups, etc. Later we had a more psychosomatic theory in which we were told we must consider the molecule as a whole. We were to look out for conjugated chains of alternate single and double bonds. Around 1939 we had the strongly metaphysical theory (Sidgwick *et alia*) of a halfway-house between several different forms of the molecule (in those days everything could be 'explained' by 'resonance'). We had thus progressed from the hardheaded materialism of the nineteenth century to the ghostly mysticism of the mid-twentieth. Could the lecturer please tell us whether there has been any progress since 1939? What is the fashionable theory to-day on the origin of colour in dyes?

THE LECTURER: In designing colour molecules for the dyeing of textiles the chemist is almost always concerned with a nice compromise between the colour aspect and the property aspect—that is, both with colour and with affinity and fastness. This means that he is not even primarily influenced by the latest fashionable theories about colour. The history which you have recited implies, I think, that he tends to move from one working hypothesis to another rather than to have at any moment of time a valid summarizing theory. This is not surprising, since the problem of colour in terms of a vibrating molecular structure and the manner in which the human eye reacts to it is extremely complicated, and I think we are still a very long way from anything more than useful working hypotheses. I doubt whether any significant new concepts about molecular structure and colour have emerged in the last twenty years. In the meantime the needs of the dyer must be met and the chemist uses what tools he has available.

MR. JAMES F. D. BUTTERWORTH (Society of Dyers and Colourists: S.W. Section): My question follows the same line of inquiry about theories of molecular structure and colour. I am in no way questioning Dr. Vickerstaff's proof that the reactive dyes become chemically bonded to cellulose, but is it not strange that when it can be bonded to a large sluggish molecule such as cellulose, very little colour change takes place?

THE LECTURER: A useful working hypothesis about colour can be based on concepts involving systems of conjugated bonds and the presence of auxochromes. Indeed, the hypothesis is a valuable if limited forecasting mechanism which is a fairly good test of a generalization. According to this hypothesis the colour depends on the overall length of the conjugated system and the size of any attached groups or auxochromes. You suggest, arguing from such a colour hypothesis, that if one reacts a coloured molecule with a large structure like cellulose there ought to be a change of colour. However, there are certain groupings—groupings which the dye chemist calls 'chromophoric blocks'—which act as deliberate interruptions of the flow of conjugation through the whole molecule. Such groups can act as a block in the linkage between one coloured molecule and another coloured molecule. This means that if one links a yellow with a blue through such a block the overall effect is green and not a brown or black as one might expect if there were no interruption in the total conjugation. It so happens that cyanuric chloride, which I have mentioned specifically, has been known for a long time to have this characteristic of a 'chromophoric block'. Indeed, there is one dye on the market to-day, Chlorantine Green, which depends upon the mixing of a blue and a yellow through the cyanuric chloride block.

MR. A. A. JOSEPH (Co-ordinated Colour Ltd.): Could Mr. Paine tell me why, when dyeing the direct dye on cotton, you cannot get anywhere near the colour clarity that you can get with dispersed dyes on cellulose acetate? The brilliance is much greater on cellulose acetate than on cotton.

THE LECTURER: This is an interesting question, which again depends upon the fact that in designing dye molecules the chemist is always compromising in terms of structure between the various properties required. In order to get direct affinity for

cellulose we have seen that a long conjugated structure is required. This, on the basis of the colour hypotheses we have been talking about, usually means a deeper, less dramatically pure shade of colour. On the other hand, most of the disperse dyes have smaller and more compact molecular structure and therefore on the same basis should be brighter and clearer in shade.

DR. LASZLO ZAKARIAS: I identified ingrained dirt in sundry publications as a fixed dye within the fibres. My two questions are: (1) What evidence is there for a chemical reaction of procion within the fibre, and (2) if ingrained dirt has to be washed out in presence of procion dyed fabrics, which will survive—procion or dirt?

THE LECTURER: The various pieces of evidence about actual reaction with the fibre are quite numerous. One is that when dyed and fixed in the proper way, the reactive dyes cannot be removed from the fibre by organic solvents like pyridine or chloroform as even the vat dyes can be. Again, if a water-soluble polyvinyl alcohol is taken as a simplified model of cellulose and is dyed with a reactive dye, the physical properties of the polymer are entirely changed. It is no longer water-soluble although it will still swell in water. Similarly, cotton which has been suitably dyed with reactive dyes is no longer soluble in cuprammonium solutions.

Your second question is difficult to answer without a precise definition of what is meant by ingrained dirt. The term usually implies that the discolouration is so firmly bound to the fibre that it cannot be removed by any normal washing or cleaning process although it may possibly be removed by chemical treatment which brings about some measure of chemical attack on the fibre itself. If treatments of the latter kind are envisaged, it is perhaps not very profitable to consider the relative chances of survival of dirt and reactive dye. If normal washing and cleaning processes are contemplated, the probability is that the ingrained dirt and the reactive dye will remain side by side.

MR. G. VIVIAN DAVIES: I had a practical experience of the fastness of dyes in cloth. What is the effect of modern detergents on some of these dyes? I had a coloured shirt washed with some white handkerchiefs. I thought the coloured shirt, which had some red in it, was fast, but apparently it was not as it coloured all my white handkerchiefs pink; and however much they were washed subsequently those handkerchiefs remained pink. Why, if the dye was not fast in the shirt, should it be fast in the handkerchiefs?

THE LECTURER: A very practical question. Without knowing all the details of the particular specimen, it is difficult to be quite precise. Was the shirt a very heavy shade of red?

MR. VIVIAN DAVIES: I don't think so.

THE LECTURER: Well, for the purposes of illustration let me say this: deep shades are obtained by increasing the weight of the dye on the fibre. Unless special precautions are taken a proportion of the dye is not as firmly fixed to the fibre as the remainder and is therefore redispersable by soap or a detergent. If the washing takes place in the presence of a white cotton fabric the redispersed colour, particularly if it is a direct dye, will then affix itself to the white material. Further, since there is only a small quantity of dye to be held by the white fabric, it will therefore be correspondingly difficult to remove by subsequent washing. These are the sort of problems a dyer has to take into account in selecting the dyes he uses for particular purposes. In considering fastness standards, the question really to be answered is, what fastness is required for a particular functional purpose? For example, a lining fabric—say at the back of a waistcoat—is probably never going to be exposed to sunlight or be other than dry cleaned. The additional expense of the highest standards of light and washing fastness would not be justified in these circumstances. It may be that your shirt was either incorrectly dyed or the right dye was not chosen for the end use.

MR. MAURICE CONNELL: The recommended instructions for use supplied with English and Swiss reactive dyes vary considerably. Does this mean that they are substantially different?

THE LECTURER: Some of the continental dyes are substantially different in structure from the English ones, and require more vigorous conditions to get the same degree of fixture. There is no reason why one should expect them to be identical in chemical structure. We have been talking about the principle of reactive dyes, and there are several embodiments of the principle that one could envisage.

THE CHAIRMAN: When one hears Mr. Paine talking, one thinks he probably devotes the whole of his time to the development of dyestuffs and cognate subjects. Some time ago, when listening to the B.B.C. Brains Trust on a Sunday afternoon, I was amazed at the erudition of one of the members, who apart from being a great scientist is able to recite poetry and refer to historical facts and data in a most wonderful fashion. I am inclined to believe that our lecturer could similarly surprise us. I understand that he is an expert on Shakespearian production—and that is about as far away from dyeing as one could get. He is also greatly interested in adult education and has devoted some fifteen years to that subject in Wilmslow.

We are greatly indebted to Mr. Paine this afternoon for giving us a wonderful talk, so skilfully illustrated by experiments and colour slides. I am sure you were as much struck as I was by the clear replies he gave to all your questions. This lecture is indeed a worthy Pope Memorial Lecture, and in proposing to Mr. Paine a very warm vote of thanks I am confident of your unanimous support.

The vote of thanks to the Lecturer was carried with acclamation, and the meeting then ended.

VOLUNTARY SERVICE OVERSEAS

The Thomas Holland Memorial Lecture by

ALEC DICKSON, M.B.E.,

*Project Adviser to Voluntary Service Overseas, and
Secretary, Commonwealth Studies Committee, The
Royal Commonwealth Society, delivered to the
Commonwealth Section of the Society on Tuesday,
23rd February, 1960, with Sir Hilary Blood, G.B.E.,
K.C.M.G., Chairman, Commonwealth Section
Committee, in the Chair*

THE CHAIRMAN: This is the Thomas Holland memorial lecture, which is delivered every year in memory of the late Sir Thomas Holland, a former, and most distinguished, member of the Society's Council. May I say how pleased we are to have Mrs. Munro Runtz, Sir Thomas's widow, with us this evening?

I think that we are going to find this lecture particularly interesting for three reasons. In the first place, Mr. Dickson himself has led a very full and very interesting life. I do not propose to dig too far back into his biography—it is always embarrassing on these occasions—but he was one of the initiators of mass education in East and West Africa, and was largely responsible for setting up, at Man o'War Bay in Nigeria, an organization similar to the Outward Bound schools in this country. He was concerned in fundamental education in Iraq, he worked for refugees at the time of Munich, in Berlin after the Second World War and, more recently, during the Hungarian uprising. He is in international demand as a youth organizer and trainer, and has recently returned from a duty of that kind in Pakistan.

Now in addition to this interesting background, Mr. Dickson is an enthusiast; a red-hot enthusiast, a man with a burning sense of mission—I know this because I get scorched by it myself from time to time! His great enthusiasm, his burning conviction, is of the importance of social work and social service and of the need for such work to be carried out by the young. I believe that his measure of the moral stature of the youth of any country would probably be the extent to which it is prepared to volunteer for social work; volunteer for it not as a dull chore, but as an adventure, something to be undertaken because it is fun and because it is interesting to do. Voluntary Service Overseas is one of the ways in which this desire of youth in this country can in some measure be satisfied. It is a most interesting concept.

The following lecture was then delivered.

THE LECTURE

Many will know the quotation from George Santayana, where he speaks of ours as the most 'boyish' Empire that the world has seen.

Perhaps fewer may be familiar with that poignant moment in *The Autobiography of an Unknown Indian*, when Nirad Chaudhuri—the author of *A Passage to England*—expresses his feelings on seeing, towards the end of 1914, in the Eden Gardens and on the Maidan, the first young volunteers from Britain, drawn from the flower of Kitchener's New Army, and so different from the

Regulars dear to Kipling's heart. Though himself caught up then in Bengal student nationalism, he describes how strangely touched he was by 'these boyish soldiers, finding on their usually solemn faces a dreamy unworldliness which I had never expected to see amongst Europeans—these young men whom it was so natural and easy to idealise, and who were to contribute to the decline of English greatness by dying in their thousands on the dull battlefields of France'.

The motives that have moved people to support this endeavour of Voluntary Service Overseas have been many and varied. Some from a concern at the ending of National Service: headmasters particularly, wondering what their school-leavers might do in 'The Year Between', before they could gain places at the universities: some in the hope that the zeal with which students have offered themselves for work camps and refugee relief in Europe might be applied to international programmes of technical assistance: some from a conviction that our survival as a nation must depend on our ability to explore new approaches and develop experimental projects: others because the concept of Commonwealth ties is very precious to them: and others simply because they care for young people.

With myself, several experiences over a period of years gave shape to this idea. During service in three colonial territories one saw administrators and other officials constantly on the defensive, harassed, either looking nostalgically to the past or sceptically to the future. Experience seemed to avail us little, for always it was mature experience retreating before enthusiasm, an enthusiasm of youth which we did not know how to handle, and which indeed we feared. Youth, our own youth, could not arrest these forces which are historic and inevitable, but in the different kind of relationships now developing, qualities are demanded of us that are perhaps more easily found in the young.

Those who have seen *The King and I* may possibly have wondered whether Anna was not quitting the Court of Siam at the very moment when the boy King stood most in need of companionship. Governesses—possibly the most remarkable of British exports of the last century—are no longer in fashion here to-day, just as Governors, too, are going out of circulation overseas. In the silent social revolutions now convulsing the less developed nations, companionship itself may have a part to play. Writing in the current number of *Corona*, one of our returned volunteers ends his description of a year spent amongst Longhouse communities on the remote Baram River with these words: 'In the problems of our Kayan schoolboys, most of whom were the same age as myself, I found a tremendous similarity with the problems of my own life, which were just beginning to become clear for me. . . . From the point of view of the people with whom we were living, may it not be that the ideas and experiences of unqualified, immature young people from the countries of the West can give the best attitude of mind to cope with the problems of the immature young people of the East, so conscious of the part they are going to have to play in their country's future?'

As my service in West Africa drew to a close, this idea was still only a feeling.



['Nigeria' magazine]

*Instruction in artificial respiration at Man o'War
Bay Training Centre, Southern Cameroons*

In Iraq, where I headed a Technical Assistance Mission responsible for what Unesco calls Fundamental Education, the feeling became both more insistent and more articulate. Not once but a dozen times, standing in some pitifully squalid village and glancing at my team of international experts, our Egyptian Professor and our Mexican specialists in rural health and home economics, I would ask myself, was it ourselves who should be there? Why should not Iraqi students from Baghdad be sharing in this work? Those from the faculties of Medicine, of Education, of Engineering, surely they possessed already technical knowledge that these villages needed—and was it not their country, their language, their fellow-countrymen, and above all, their responsibility? Whatever they had to teach, heaven knew they had something to learn—about the real nature of Iraq's social problems. But one had only to formulate this thought to realize that this was a message that no amount of earnest exhortation by middle-aged and highly remunerated experts could ever convey. This was something that could be conveyed to the young only *by* the young—and only then if presented not as a technical mystique or a moral duty, but as an adventure in discovery.

So far the need for this more youthful approach was something I had perceived only from the point of view of its urgency overseas. But back in Britain, after

[*East African Standard*]

Instruction at the Christian Industrial Training Centre in Nairobi

many years abroad, it seemed suddenly to have application to our situation, too. Youth work appeared to be in the doldrums—faced not so much by those physical defects of dingy premises that have so impressed the Albemarle Committee as by a spiritual dilemma. What is this dilemma? Britain has led the world in youth work, with the founding of the Boys Brigade, of Scouting, of the Boys Club movement: so far as adventurous training is concerned we are still the pioneers, with the introduction of Outward Bound schools and of the Duke of Edinburgh's Award scheme. But a sense of adventure does not only need stimulation—it seeks opportunity of practical action. Returned from the summer camp or from the winter course, and back again in Laburnum Grove, Suburbia, or on the factory floor—and the vision glimpsed on the mountain tops seems to fade, starved of the chance of fulfilment in situations of real need.

Experience on the Hungarian frontier during the winter of 1956-7 brought this realization nearer. Working beside us in the snow at night were a group of students, from Oslo, Paris, Vienna and other universities, drawn there because they felt, rightly, that this was the most important place in the world at that moment, and undertaking those actual deeds of rescue—such as ferrying refugees across the canal that formed the frontier—which our international relief organizations could not bring themselves to do for fear of compromising their status.

In those nights it was as if these students almost visibly expanded: for the first time in their somewhat sheltered lives they felt really needed and knew that they had something to give.

To feel needed, to have something to give—is this not what most of us long for, and above all at that age? But how difficult it is, in this affluent society of ours, in this highly industrialized Welfare State that is Britain to-day, to find situations where we can have this feeling. Might it not be overseas, in the less developed territories, that some, at least, of the best of our young people might have something to give and where their contribution would have genuine meaning?

This, then, was the idea—and kind friends in Whitehall lost no time in pointing out that an idea was all it was. 'This is a technological world', I was told. 'Look at the advertisements in *The Observer* and *The Sunday Times*—it's radiologists, harbour-board managers and engineers in pre-stressed concrete they're looking for overseas—not, repeat not, British schoolboys.' And did I not realize that this was going against the whole stream of African and Asian nationalism? Were these newer countries not hell-bent on ridding themselves of white civil servants as quickly as possible?: they certainly weren't inviting re-invasion by hordes of British students. Eighteen-year-olds had nothing to offer save their pimples, remarked one critic, whilst the Governor of a West Indian island wrote saying that the idea reeked of condescension and a holier-than-thou attitude which would be strongly resented. Institutes of Education winced at the danger of dilution that untrained teachers would present.

Let the facts give the answer. Sixty volunteers are at this moment serving in some eighteen different territories, from Central America to S.E. Asia, from the Middle East to the South Atlantic. If we include those who have already completed a year of service overseas, the figure is nearer eighty. It is just seventeen months ago since the first ones left.

In the Falkland Islands two work as itinerant teachers, travelling by plane and boat and ultimately on horseback, visiting the scattered farmsteads where they stay with the shepherd families and teach the children. It is perhaps significant that these posts—which were advertised for a year without attracting applicants, because of their remoteness and lack of settled life—should have proved amongst the most popular of all projects for our volunteers. If the challenge is real and touches their imagination, the young will respond. Why do we not make greater use of this truth, in our own community and in the wider Commonwealth?

In British Guiana two volunteers are working, each in a different world, the one teaching science at a brand-new secondary school on the Demerara River, the other engaged in community development, quite alone, amongst the Amerindians. The first went straight from Stevenage, where he had given evidence to the Gulbenkian Foundation's Committee on Youth Work in the New Towns, and where his old headmaster practically mobilized the science staff of Alleyne's School to prepare him for the task that would face him within seventy-two hours of landing in Georgetown. The second has written: 'I'm really on my own now amongst the Amerindians, and count myself lucky in my

status as a non-official. It means I do things with them instead of from above—if I organize some meeting I don't go by motor boat, I paddle there with one of them in a coracle.'

In Jamaica two others are making a notable contribution to youth work. They have stimulated club-members to build their own premises, and have stirred amongst young Jamaicans a readiness to explore their own island, even into the Cockpit Country. One, working for a while with young delinquents, has written: 'I think I must be the first Englishman of their own age that they have met who was prepared to know them and become their friend—and they have pummelled me with questions.' Small wonder that, in sickness, he should be visited by them in droves, or that in one letter there should shine this sentence: 'This wonderful thing called the Commonwealth.'

'The trust that everyone here puts in a nineteen-year-old from England is quite amazing', writes one of two volunteers teaching in British Honduras; and though he records this expression of trust on a sheet of notepaper evidently 'lifted' from Government House in an adjacent territory, it is clear that he has deserved the faith and friendship not only of his pupils but of the street kids, not least for his resistance to the sacrifice of their playground to make a cricket-pitch for the M.C.C.'s match at Belize in April.

Let one volunteer speak for the dozen who have been working in Ghana, Nigeria and the Cameroons. 'I see the year as a sort of bagain between me and Nigeria. I gave Nigeria a year of my life. In return Nigeria gave me many things: friendships I long for now that I no longer have them, greater freedom of thought and action, and above all a new perspective on my life in England. To find certain ideas which I had always taken for granted actually questioned and denied, shook me considerably. Deeper even than this, on the mountain expeditions I began to realize the value of human relationships, of mutual trust and faith, as I had never done before. So many of my relationships with other people had been on a basis of irony and cynicism, that to discover this was not even understood, let alone common, was at first very jarring. . . . And to think that I might have been working in an office.'

Of the five volunteers serving in Nyasaland, two as assistant housemasters at secondary schools and three in youth work, there comes to mind a taut, white-faced boy, from a family background quite without any proconsular traditions, torn between anxiety at the thought of leaving home and a sense of calling to go to Africa. Equipped with a trombone, a football and the faith of his headmaster he has established himself in the turbulent slum society of Blantyre, welcomed everywhere with his music and distinguished as the only white-skinned member of a crack African football team. These things count in Nyasaland to-day, and if he fulfils his ambition to reach the School of Oriental and African Studies, it will be the latter that is enriched.

From the letters of nine who have been serving in the one territory of Northern Rhodesia—assisting hard-pressed District Commissioners in remote rural areas, helping in youth training, and undertaking social surveys—I choose three quotations. 'It is not Communism that threatens Central Africa so much



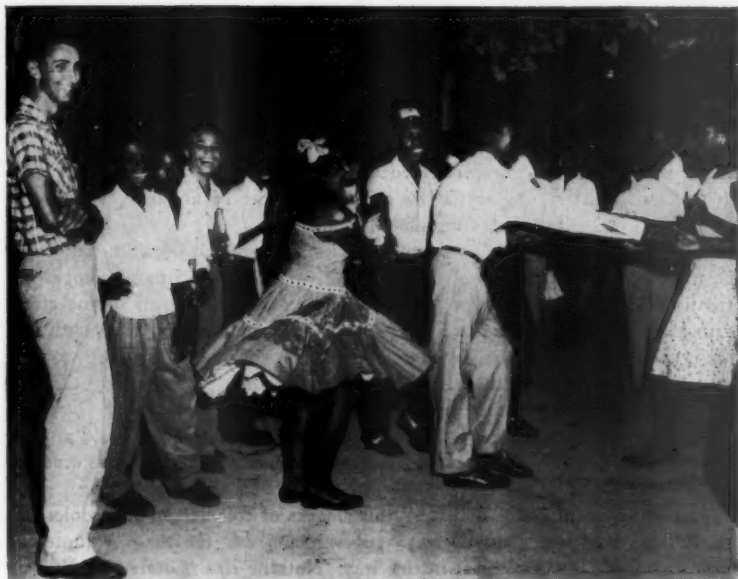
[Somaliland Information Dept.]

Scouting in Somaliland

as pessimism.' 'How wonderful to be on the *truth* side of things'—this, at the time when local reactions to Mr. Macmillan's Central African visit were being widely (and wildly) reported here. And this: 'My only regret is that Africa has given me so much more than I have given Africa.' Of all these volunteers it might be said: they leave as boys—to return as men.

Within four months of arrival in Hargeisa to assist with teaching, one volunteer—a Queen's Scout—has doubled the number of Scouts in the Somaliland Protectorate, with the approval and blessing of headquarters in Britain: and his last letter reported a waiting list of seventy-five. On the other hand, in Aden it is no Sanders-of-the-River or John Buchan rôle that has fallen to our boys. They face the far more subtle task of winning the friendship of young Arab students—no easy matter for Britons to-day. Something of the same problem confronts our two boys helping to train young Pakistanis at a Cadet College in the equally austere and exacting desert province of Sind. Yet this is the real challenge of the Commonwealth in 1960—and who else than they can meet it?

And so to South-East Asia. I think of our two in the villages of South India, whom it was my pleasure to visit personally eight weeks ago: of our volunteer assisting with a survey of the needs of youth, in Singapore: of the nineteen-year-old helping to run a Boys' Home in Penang, whose arrival and work were



[Jamaica Public Relations Dept.]

*A volunteer at a youth club dance
which he organized in Jamaica*

described by the officer concerned quite simply as an answer to prayer: and of those in Sarawak and North Borneo, where we have sent more volunteers than anywhere else, primarily because it was Sarawak that generously took a chance in accepting the very first group.

I have left Kenya to the last, for two reasons. First, because it is to Nairobi that we have sent the first girl: and such are the reports on her work with African women that we shall have no hesitation in sending more. Second, because it is also to Kenya that we have sent our first volunteers from industry.

This could be a most significant development. It is not just that the apprentice has a technical skill to offer, of such obvious value to training schemes in less developed countries: or—important though this is administratively—that the firm pays. If this endeavour is to have any lasting meaning, then these opportunities of service must be open to all sections of the nation's life: we need to call on the best of our young people—from all backgrounds.

When I asked Viscount Chandos eighteen months ago, not for money—as he no doubt expected—but for apprentices, he was taken by surprise. Would youths, so near to earning full adult wages, offer themselves for work without reward for a whole year? Would the Trade Unions agree to an interruption in the apprenticeship period? What about Night Schools?

In fact, no proposal put to the apprentice force at Metropolitan-Vickers in the last dozen years has caused so great a stir, I was told. When I went to Manchester to choose two from the short-list of seven—to which the management had, with difficulty, reduced the number of applicants—I remember that the top letter on each of the seven files was from the parents, replying to an inquiry from the company as to whether they would authorize their son going overseas. In every case the parents said not only did they consent, but how proud they would be if their son were selected: and added that the financial sacrifice involved, in that nothing would be coming into the family budget from the boy's wage-package for twelve months, was one they gladly accepted.

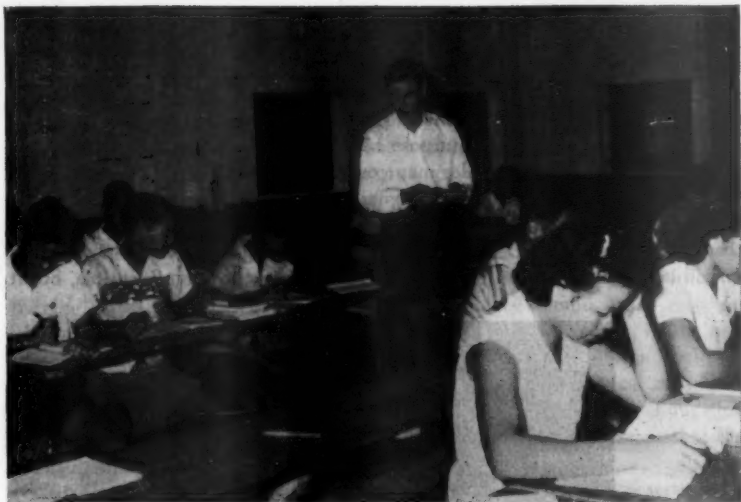
Technical Assistance—and the whole relationship of the Western nations to the under-developed countries of the world—will more and more compel the attention of our generation. As yet this scarcely touches the man in the street or on the factory floor: it is surely important, psychologically and politically, that it should. Can there be any more effective way of involving young workers than enabling some of their number to make their contribution through personal service—so that they may feel that they have, if not exactly *Our Man in Havana*, then at least their lad in some project overseas? This would give an altogether new and welcome meaning to the *Wanderjahre*, the continental concept of apprenticeship enriched by experience in a different setting.

Some critics would have it that all this smacks of colonialism and adolescent do-goodery. Why, then, do overseas governments ask for these volunteers? One Governor has expressed it in this way. 'Nothing else matters in S.E. Asia except the attitude of mind of young Chinese. And nothing that our experienced, trained, mature and middle-aged Administrators and Officials have to say, will they listen to any more. It is only what other eighteen and nineteen-year-olds say and do, that they will pay attention to. Ergo, send us the best you have, as many as possible, and as quickly as you can.'

Another Governor has recorded what he thinks of their actual work in these words. 'They have lived with the people and won for themselves positions of leadership through their own efforts. They have done more than anything else to create a pro-British feeling in the two districts where they are stationed: and I have learnt from them more about the thinking processes of people here than I have been able to glean from all other sources put together. In my view this is unquestionably the finest way in which the links can be preserved. Our two boys have been worth more than any Information Service.'

But parents—and parents do count!—will most cherish letters received out of the blue from those who have worked alongside their sons, a Chinese dentist voicing admiration that a volunteer should have learnt Dayak, a Jamaican businessman putting pen to paper to express reassurance over a boy's illness.

In South India I was told of the Education Officer from Madras who was amazed to find two white-skinned youths working beside the dark Tamil villagers, and exclaimed: 'The incredible British, they leave as rulers—and return as friends.' If further evidence is needed that nothing patronizing is sensed by independent governments in the contribution that our young people



Teaching Land Dayaks in Sarawak

can make, it is surely shown by a request just received by airmail from the Pakistan Government, asking for volunteers to promote amongst their students in East Bengal just those activities—social service, youth work, etc.—which do lie in the power of our young people to give. I welcome this particularly as I find myself quite out of sympathy with the prevailing view that more expert teaching of the English language is the best or only way of presenting the British way of life. People are still our best export—and we ignore the field of training in youth work and social service overseas at our peril. Countries to the north of the sub-continent make no such mistake. And British industry might note to-day that trade follows training.

Do things go wrong? Of course. We have no infallible Geiger Counter for the detection of human faults. Mistakes have been made in selecting candidates, and on four or five occasions, perhaps, the extent of the challenge has bewildered our boys. This is an age, too, of moods and inarticulate longings, and not surprisingly there are good days and bad. Furthermore, one is having to select projects (and officers in charge of projects—though they may not realize this), as much as volunteers. Matching the two naturally entails risks, at distances of thousands of miles: it is too far to throw a lifeline. Where stresses and strains occur, they arise between our volunteers and their older compatriots, perhaps the one sometimes feeling the other to be out-of-date, fussy old fuddyduddies, possibly the other resenting what is thought to be the brashness of youth. This tension between the generations is, of course, as common to Shepherds Bush or

Southampton as it is, say, to Sarawak: but in tropical territories, it should be borne in mind, the English adolescent is an unknown animal. This situation is best described by one volunteer: 'We are the youngest serving Europeans in this territory, yet we are classed with men of twice our age. We are expected to participate in the lives of young people here—and at the same time to behave as men of forty or over. We cannot do both. Our main asset is our youth—and I feel I am best fulfilling my purpose here by being in closer contact with the youth of this country than older men could be.'

Yet any note of arrogance or smugness is totally lacking in their letters. It is, I think, because we treat them as men that they are ready to recognize that they are boys. 'I came here thinking I was going to teach—I now realize I shall learn far more than I will ever teach', writes one from S.E. Asia, but it



A tinsmith class at the Long Lama Development Projects on the Baram river in Sarawak

is characteristic of them all. 'The confidence that the Nigerians place in us is frightening, and I feel humbled', writes another. Gratitude for this experience is expressed by nearly every one, and like a *leitmotif* there runs the sentence: 'I shall not let you down.' It is important at this age, I think, that they should feel that someone who has himself experienced some of the difficulties they face should have confidence in their ability to deal with them—and should care personally how they fare.

All this is not achieved without cost. And because Trusts and Foundations—rightly—are not keen that a scheme should climb on their back, we are trying to develop a process of sponsorship. Industrial firms sponsoring their own

young workers have already been mentioned: certain other companies, which do not have a large labour force, have generously 'adopted', financially, volunteers of our choosing to serve in regions where they have special interests. This summer, for the first time, a well-known school (the Friends School, Saffron Walden) will enable a school-leaver to give a year in voluntary service overseas—in welcome contrast to 99 per cent of bursaries and scholarships that enable students only to get. In Warrington one hundred industrial apprentices have pledged themselves to put up £50 towards the cost of one of their number giving a year's service overseas. Our own first volunteers who returned in September hope to raise within eighteen months, with the help of those now serving, enough money to despatch a further volunteer. The Central London Branch of a Trade Union is anxious that these opportunities should be open to their youths in training, in the belief that helping the less privileged should be an essential part of their experience. The City of Portsmouth will, this summer, be the first city in the United Kingdom to sponsor a volunteer. This pattern could be developed extensively, harnessing civic pride to projects of technical assistance, combined with a service to—and by—their own youth. Local Education Authorities are willing to make the grants: it is cause for amazement that the Ministry finds reasons why they should not.

Can we continue to produce the volunteers? Some hold that, now that the schools and universities are adjusting themselves to the ending of National Service, this period of 'The Year Between' will disappear, leaving few either able or willing to offer themselves for twelve months. Others believe that encouragement should be given to boys to defer, of their own free will: certainly one great Oxford classicist, Sir Richard Livingstone, would support the view that the Humanities can only be understood truly by those who have experienced the wind and the rain. Others, again, feel that we should be exploring possibilities for those who can give only eight months' service, on leaving school in December, in areas not so far distant.

Certainly one of the big challenges we have to face is the possibility of this scheme working in reverse. We should not be surprised if nations like India wish to see some of their own young people giving their service, similarly, overseas. Already Western Australia is thinking in terms of sending some of her young people to serve in less developed territories in South-East Asia. Suppose that we in Britain were asked to accept a number of volunteers from Asia for service in projects here (as we accept Winant Volunteers every summer for social work in the East End of London)?

And this leads me to the crux. Sixty volunteers only—even if it were six hundred—would be only a minute percentage of our youth that is affected. Are we justified, then, in making all this fuss? Yes—for I am quite convinced that this approach has equal validity in Britain to-day. It is not at club premises, sordid or shiny, that we should be looking. It is at the tasks which are vital to the maintenance of the community, but which—because they are dull or dirty or dangerous or ill-rewarded—are left to a new helot class of Ukrainian D.P.s or West Indian immigrants, or indeed, left undone altogether. Could work

at these jobs—for a limited period, at a particular age or a certain stage—be presented as an imaginative call to service, to duty even? Is it actually true that we have it so good to-day in Britain that there are now no human needs left, to which the young can contribute?

It is my belief, based now on a number of pilot projects conducted with young industrial workers, that this adventure into service can be made as meaningful in the slums of Liverpool as in Sierra Leone, in Notting Hill as in North Borneo, at an Approved School in the Midlands as at Aden College in the Middle East. Though these challenges here may well be more difficult to find and more subtle to present, the contribution that the young can make in them may, as overseas, have a quality and value of its own.

Fifty years ago the gibe was levelled at the Scout movement: 'It can't be Education—why, they like it!' To-day, if the philosophy of the Albemarle Report takes root, we may find ourselves exclaiming of some group of young people: 'It can't be Youth Service—why, they're helping other people!' Two years ago I heard Prime Minister Nehru's daughter say to a meeting of Congress students on the tenth anniversary of India's independence: 'For young people in the West social service is a luxury—for us in Asia it is a necessity.' One knew what she meant—but, in fact, it *is* a necessity for our youth, too.

The Spartans exposed their young on hillsides, so that only the strong might be saved. If *our* young are to be saved, then we should be exposing them—not in infancy, but at an age no less sensitive emotionally—to situations of social need, where a sense of compassionate service may be aroused, where they may feel that they are really wanted.

DISCUSSION

MR. R. H. WALLIS: Towards the end of Mr. Dickson's paper he mentioned that the scheme had application also to voluntary service at home. I wonder if he would elaborate a little on how he thinks we could put that into practice in the sort of age in which we live?

THE LECTURER: I can best answer by describing what actually has happened in three cases and will happen, I hope, in a few weeks' time in a fourth. I and one or two others believe that the apprentice himself is now a privileged young person, perhaps in the same position as the public school boy was forty years ago, only with a technical future in front of him. With this conviction, we are prevailing on Training Officers in industry to release some of their apprentices for a month or three weeks of adventurous service in Britain in situations of genuine need. In one instance we have had an apprentice from a well-known firm in Stoke-on-Trent working as a night-ward auxiliary in a hospital home for old men. Not every one's idea of romance and adventure may lie in emptying bed-pans and the like, yet this experience did touch something in this 19-year-old, and the genuineness and spontaneity of his contribution certainly moved the old men. He has gone back and spoken to his fellow apprentices, and now each one is asking, when will his turn come?

The second apprentice from that firm—Michelin—actually relieved the technical instructor at an Approved School during his holiday; taking over not only the job of technical instruction but duties in the dormitory, on the playing-field and in the eating-room.

The third one, from Burroughs Wellcome, served for three to four weeks in Notting

Hill helping a one-man Citizens' Advice Bureau, assisting West Indians in trouble with their landlords, and joining the White youth club to find out what made the 'teenagers of Notting Hill tick.

I hope that within a few weeks another apprentice, from a very well-known firm which makes 90 per cent of the refrigerators in the ocean-going ships of the world, will give a month to work in a leper home in Essex. (It is a small but significant comment that this particular institution has experienced great difficulty in getting staff, and that the only nurses that can be found to look after the lepers of British citizenship in Britain are from an Anglican Order of Sisters who are on leave from leper work in Tanganyika.)

Well, this is the concept: that tasks that are vital to the maintenance of our society but which are regarded as drab or dirty or just unrewarding can, with imagination, be presented to young people at a certain age as an adventure into service. *Adventure into Service* were in fact the words which the first apprentice wrote at the top of his report. I think this concept is just as applicable to-day in Britain as it is overseas.

MRS. FELICITY BOLTON (Honorary Secretary, Council for Education in the Commonwealth): Does Mr. Dickson feel that some of the success of the scheme is due to its voluntary nature, to the fact that a tremendous effort is made by everybody concerned? Does he think that the same enthusiasm would be put into it and the same success would result, if it became linked up with official sources? Has he thought in terms of trying to turn his venture into that sort of thing in the future, or does he think that might spoil the freshness and the enthusiasm which may come from its voluntary aspect?

THE LECTURER: I sometimes wonder whether the fact of a thing being voluntary is the only or principal criterion in youth work. Like everybody else of my age, I was a soldier in the war, and I can recall units I served in where morale was white hot. More recently I can recall visiting voluntary organizations where morale was at bottom. I do not share the view, bred in us by British liberal tradition, that what is done voluntarily is always done gladly and ecstatically, and what is done within a different framework, possibly under authority, must necessarily be done reluctantly. It simply does not square with my own experience.

At the moment the Indian and Pakistan Governments are considering very seriously what they can do about the attitude of student youth in their countries. That was the impression I brought back from a recent visit to Asia, where at every turn, to anybody who would listen to me, I rammed home the point that it is not what the Chinese army is doing that threatens them, it is the contrast between what Chinese youth are doing for the regeneration of China (under Communist impetus, I know) and what the youth of the free countries in South-East Asia are so manifestly *failing* to do for the regeneration of their own countries.

Whether or not work is done voluntarily may in fact not be the chief question, but—is it important? do young people feel needed? The sad fact has to be faced that there is probably more élan in youth work in East Berlin than there is in West, since it is probably easier for young people on the other side of the Iron Curtain to feel that what they are doing is of vital importance to their community and their nation.

In the voluntary work camp movement in Britain to-day, for example, it is only tasks of very marginal importance that can be tackled, such as constructing a children's playground or whitewashing an old people's home: whereas in Eastern Europe and in the less developed countries the tasks confronting young people are manifestly of urgent or national importance. It is this feeling of being really needed that may count more with young people to-day, and which may transcend this old frontier that we have grown up with, this rigid frontier of voluntary on one side and compulsory on the other.

Having said this, I would naturally hope that the basic concept of this service being given voluntarily by young people might be retained. But how far the administration and financing can be maintained or developed as a voluntary endeavour is very dubious. I myself would like to see it either as the spearhead of a Commonwealth Youth Trust or as the youth 'wing' of the organization being set up for the supply of teachers to the Commonwealth.

MR. NORMAN WELTON: Would Mr. Dickson agree that in addition to the idealism of youth, their realism is a very good thing? I know three youngsters who have taken over the job of taking people off the Embankment—mostly very old men who are beyond reform; they simply have a sense that somebody is interested in them. Now those three youngsters (one of whom had done three years apprenticeship as an architect) have given up their jobs to do this work, and they are doing it as realists better, perhaps, than some whose idealism rather expected the impossible; these boys know exactly what they are doing and do not expect anything wonderful in the way of results.

THE LECTURER: I agree, but I do not want, on the other hand, to overstate my case. I am not saying that the untrained eager volunteer, the amateur, is better than the mature, experienced middle-aged man—or I should be out of work myself! Obviously, it is the latter who makes the work and contribution of the former possible. Certainly my feeling when I worked for Unesco was that expertise is not everything; it is the combination of the expert with the enthusiast that is important.

I would agree with the realism. What I feel is important is that the tasks that are presented to young people should be genuine tasks and not artificial ones. At the age of 15 and onwards, most young people are no longer satisfied with the romance of make-believe, they want to feel that what they are doing is of real importance to other human beings, to the community, or to the nation. It is not so easy in our highly developed Welfare State to give them this feeling. As I have indicated, I think it is possible, but it requires a completely new approach. This is one of the points which I do not think the Albemarle Report has brought out sufficiently.

The approach I have in mind is this. Here in Britain, even, we have our underdeveloped territories—such as the Highlands and Islands of Scotland: and with fifty million people there will always be problems of human need, no matter how affluent our society may become. Which are the problems and situations that young people might have a particular contribution to make to? This should be our starting point, rather than examining the needs of youth: for the real basic need of young people is that they should feel that their service is genuinely wanted.

MR. R. D. FAIRN (Prison Commission): I should like to find out how catholic Mr. Dickson would be in his selection. As he probably knows, we send some of our Borstal boys to the Outward Bound schools, where, I think, they not only get something but give something. My friends in Kingston, Jamaica, or in Nairobi might be a bit nervous at having a Borstal boy out there for voluntary service, but what about taking our own medicine first? Would the suggestion that a prisoner or a Borstal boy could be made available for voluntary service in this country be considered? What we in the Prison Commission are trying to do at the moment is to find situations in which our people can minister to a genuine need in the community.

THE LECTURER: So far as I personally am concerned, the answer is yes. (If I may intrude a more autobiographical note, just as some of our volunteers have written in their letters, 'I find myself working under a man whom I am proud to know', so in my own experience, it was one of your predecessors, Alec Paterson, who set me in the direction that I have tried to follow since: I know that he would have shared your feeling that we must take a risk.) I should gladly accept selected Borstal boys for projects in this country.

SIR SPENCER SUMMERS, M.P. (Outward Bound Trust): I hope I am not the only person here who would like to do everything that lies in his power to further the ideas that we have heard described this afternoon, for Mr. Dickson's case could hardly be put more convincingly. He implied that when considering the right age at which to select these young people, whom he described as adolescents, to go overseas, there comes a time when they lack the freshness, the immaturity, the charm which is the essence of the case he has put to us. How big a risk would he run if in recruiting he took young men of 20, 21 or 22, because he thought they were made of the right stuff? Where would he draw the line?

THE LECTURER: Obviously the contribution which a volunteer three or four years older than those we have been sending hitherto can make will be a contribution three to four years more mature, more experienced, and possibly with that degree more of technical qualification and skill. Some are now going overseas under the ægis of other organizations, but two in this category whom we have overseas (one having completed his National Service, the other being a university graduate) are doing quite as well as any of our younger volunteers.

As to the reasons why we have put emphasis on the 18-year-old rather than the 22-year-old, one is that there is a greater field of selection. At 22 or 23 most people want to get their teeth into a job; they have got to get started in a career; and it is only the few who are going to become available.

Next there is the risk that in some territories nationalist papers might begin to inquire, 'Who are these people coming into our country?'

Then one of the advantages is the total lack of ambiguity about technical qualifications. We stress again and again to the governments and agencies to whom we send our volunteers that they have no experience, that they are quite untrained technically. Because that is quite unequivocally stated, they are welcome. One of my fears is that if you take them at 23 or 24, it may sometimes be assumed that in fact they are more experienced and qualified than possibly some of them are, and that could lead to all sorts of misunderstandings.

These are some of the considerations. But do not read into what I am saying any feeling that volunteers of graduate age cannot make an equal and possibly an even greater contribution. I am just pointing out why in fact we have hitherto chosen principally from the younger age group.

MR. EDMUND NEWTON BURKE (Adviser on Community Development, West Indies Commission): I should like to know if Mr. Dickson agrees with Edgar Guest when he says, 'Though an able speaker charms me with his eloquence, I say: I would rather see a sermon than hear one any day'. Does he think that is pretty apt to-day, at this stage in world history, and that youngsters from the Commonwealth should go out and advertise the new outlook?

THE LECTURER: The youngsters whom we send out do, I think, advertise the new outlook. Indeed quite a lot of trouble arose in the first year's working, when they went out with perhaps an excess of the new outlook and encountered difficulties amongst their own compatriots. In the briefing that I gave them I said, 'For heaven's sake avoid the European Club. You are not being sent out for whist on Friday night, the dance on Saturday night and the tennis club on Sunday. You are being sent out to find your adventure with the indigenous young people.' Well, bless them, they took me literally, and two of them on emerging from weeks in the jungle and receiving an invitation from the Senior Resident to dinner, turned up in sarongs!

In that particular territory the sartorial indiscretions of our volunteers have given the scheme a bad name amongst the European community. You can guess where my heart is. I cannot help feeling that what clothes are worn at night is not much of an answer to Mao Tse Tung in South-East Asia. But I am now being more careful in

briefing the next lot, and pointing out that it is after all by courtesy of the Governor and the Civil Service that they are there in that territory at all.

MR. R. F. MARSHALL (Education Department, A.E.I. (Manchester) Ltd.): Mr. Dickson has mentioned the importance of the selection of the project and of the officers who will be responsible for the project. To what extent does the scheme depend upon the renewal of projects, or upon finding fresh ones? To what extent can existing projects be 'renewed' by a succession of volunteers? I am familiar with the two apprentice members you have been discussing this afternoon, and I wonder, if these particular jobs are filled by two new apprentice members, to what extent they will be as successful as the two current boys?

THE LECTURER: If there are other lads as good as your two apprentices who are now serving in Kenya, they will be equally welcome. They have won golden opinions. When I had my choice of the cream of the apprentices at Trafford Park, we chose one who was an electrical mechanic, a Scoutmaster, and who got training in boxing and first aid before he left; and the other was a mechanical fitter, top award Outward Bound, and a prominent member—if not the Secretary—of the Apprentices' Athletic team. One word occurs in the reports on both, made by the Ministry of African Affairs and the Christian Council of Kenya, and that word is 'outstanding'. Both the government and the Christian Council of Kenya are saying they do not know how they will part with these boys at the end of the given period. I remember asking one of them as we neared the airport, 'Do your mates think you are an awful mug to volunteer for this?' and he said, 'Every one of the apprentice force would have been only too glad to carry my bag'. Well, if there is that eagerness to go overseas, there is certainly the readiness to welcome them again in the very same projects.

We are now receiving so many applications for the services of volunteers that it is no longer necessary to invite requests. For example, Sir John Maud is asking for volunteers to serve in Bechuanaland, Swaziland and Basutoland, not only to help in education and agriculture, but to assist hard-pressed District Commissioners. (I do hope I shall not have to tell him that Local Educational Authorities will not be allowed by his old Ministry of Education to sponsor candidates!) Also there are requests from the Chief Education Officer in the Solomon Islands and the Government of East Pakistan. Unless we touch on some very sore spot, there is going to be no lack of requests for our young people. I see them multiplying.

MR. W. TERRELL (Colonial Office): I should like to ask Mr. Dickson if he could give us some of his ideas about the way or ways in which the movement might expand in the future if it had the resources to do so. It seems to me that here is a movement which might expand in many directions if unlimited financial resources enabled it to do so. Hitherto it has taken the form of one or two young men, or perhaps a girl or two, going off into comparative isolation in various parts of the world. It is possible to imagine much larger groups going off. There is an American organization called Operation Crossroads Africa which in 1958 sent seventy or eighty young American students to French and British territories in West Africa, where they worked on projects in groups of ten or fifteen or so. That exercise is to be repeated on a much bigger scale this year. Mr. Dickson's movement might develop in that way, or it might take the form of multi-lateral movements, people from India, for example, going to Africa; it might become a Commonwealth-wide organization. There is very wide scope for experimentation. What are Mr. Dickson's views? Does he think there might be a saturation point?

THE LECTURER: First, one might look forward to expansion of the existing pattern that we have followed, i.e., sending out more volunteers in response to requests. Second, there could be a multi-lateral development. Already there has been an

inquiry from Western Australia as to how they might send two or three school-leavers to under-developed territories in South-East Asia: I suggested they should try Papua. Canada might do something similar in the West Indies. The Malaysian Outward Bound School might send a team to Brunei, where they would find fellow-Muslims, speaking Malay, and an affluent society urgently needing the challenge of the Outward Bound approach. Pakistan might send a team, say, to Zanzibar, where they would be amongst co-religionists. And India might send some young volunteers to, say, Uganda—to work initially amongst Africans, but ultimately, one hopes, stirring a sense of social responsibility amongst the Indian communities in East Africa.

This leads me to another line of thought. One would like to think that eventually some of our volunteers from this country might succeed in touching a chord in the hearts and minds of the locally-born young Whites in Kenya and Rhodesia, so that they in turn might also find adventure in undertaking similar kind of work amongst Africans in their own territories. One hints at this possibility, when briefing our volunteers—but of course it is asking a lot of our young people, going out in ones and twos, to make such an impact on the local young settlers, without being regarded as prigs or know-alls.

Just as our young people want to feel that they have something to give, so do young nations. In negotiations with countries like India one stresses—with all sincerity, since it is so clearly true—that we are grateful to India for giving our young people the opportunity of experiencing what they cannot see in Britain to-day, how a great nation pulls itself up by the bootstraps, and how the elemental problems of poverty, sickness, illiteracy, etc., are being tackled. However, countries like India do not want to be only at the receiving end of other people's good work, nor will they be quite satisfied just with multi-lateral developments. They would like to think that some of the best of their young people might make a contribution even in Britain, just because we are the heart of the Commonwealth. One might reply that they have already thousands of their students over here amongst us—but that is not quite the same thing. What is the kind of social service project in Britain where a few hand-picked young Indians could make a contribution? (Before we can answer that question we have got to be pretty clear, I think, as to what it is that our own youth can do in Britain that is worth while in voluntary service.)

Whether volunteers do more useful work individually or in teams depends probably on the particular situation. It also depends on the cash available! I went to help at a Voluntary Work Camp two summers ago in Ghana, only a week after 'Operation Crossroads', to which reference has just been made, had undertaken a project nearby—and heard on every side praise for the conduct and attitude of these young Americans. I believe in the Work Camp movement (I have only recently returned from helping to organize one in East Pakistan) and I believe in the team approach; they are amongst the most effective ways of involving educated youth in the newly emerging countries in robust forms of social service. If by these means we can enthuse the young intelligentsia in these territories to help the less privileged, then we are making perhaps the greatest contribution of all—ininitely more important than any other form of technical assistance.

But to send a group is, of course, expensive. We have felt that sending our volunteers either singly or in pairs to twenty or thirty different projects was the most economic use we could make of them. There is the danger, moreover, that if you go in a group of forty you tend to find your friends within the forty rather than amongst the local people. We have also wanted, within an experimental period of two years, to discover what situations, what projects, what auspices, etc., offer the most effective opportunities of service for our volunteers—and this has been another reason for 'spreading our risks', so to speak, over a wide selection of territories, rather than concentrating on one particular scheme to 'saturation point'. There is, however, no

conflict between these approaches: both have their value. I share the hope expressed by the Colonial Office representative, that resources may be found to enable both approaches to be developed.

THE CHAIRMAN: You will agree that I was right when I told you you were going to listen to an enthusiast with a burning conviction.

Will you give Mr. Dickson a very hearty vote of thanks for what I think is one of the most interesting and stimulating talks that we have ever listened to in this room?

The vote of thanks to the Lecturer was carried with acclamation, and the meeting then ended.

GENERAL NOTES

THE CENTENARY OF SICKERT

In May, the centenary of Walter Sickert's birth is to be honoured by an important retrospective exhibition at the Tate Gallery, arranged by the Arts Council. Very likely some of Sickert's pictures which we have recently seen in memorials to him both at Agnew's and Roland, Browse and Delbanco's Galleries in the West End may be transferred to Millbank to do justice to the artist who dominated British painting during the first third of this century. The moment might seem ripe, then, to offer a character study of the man and a reappraisal of the artist who, in the considered view of his highly critical friend Mr. Clive Bell, was the greatest British painter since Constable and almost as much above Whistler as below Degas.

In life and letters Sickert was a great wag, never a great wit. His levity was generally as distressing to Bloomsbury as it was diverting to friends like Sir Alec Martin or Humbert Wolfe who observed that the manner was all. At the end of a visit, an undistinguished Member of Parliament rescued his top-hat by jerking it into the air on the end of his stick. 'Ah', said Sickert, with the gesture that underlines the perfect word, 'you politicians learn that trick in order to cross the floor of the House.' The listeners were convulsed by a remark which really meant nothing whatever. Throughout his life, the wit was more often in his joyously expectant audience than in the old player's throw-away line and telling gesture.

It speaks for the breeding of the 'Bloomsburys' that they never for a moment underestimated Sickert's high seriousness and standing as an artist, distasteful though they might find the quips of this crackling writer who proclaimed that it was his special mission in life to remind the more saucy of the *critiques d'avant garde* when they went too far. For Virginia Woolf, the appeal of Sickert's painting lay naturally in its literary content. 'But to what school of novelists does he belong?' she mused. 'He is a realist, of course, nearer to Dickens than to Meredith. He has something in common with Balzac, Gissing and the earlier Arnold Bennett. The life of the lower middle-class interests him most—of innkeepers, shopkeepers, music-hall actors and actresses.' Yet her eye recognized also the quality of his painting no less than the salt and savour of his evocations of life in music-halls and back parlours. Indeed, with such genius does he evoke the mood of places—the decaying tenements around Dieppe harbour, the shadowy gallery of the Old Bedford, or Brighton beach at dusk seen from a pierrot party's stage—and with such deceptive casualness recreate the sudden and accidental aspects of human encounters, that Sickert's fame has never faded, shining to-day as brightly as ever it did before he closed his door on us in 1942.

His origin was as cosmopolitan as his mind, for he had Danish and Irish blood in his veins with a strain of German, and could read in several languages. Though he entered the Slade School under the directorship of Alphonse Legros, it was a

chance encounter with Whistler which altered the course of Sickert's art education. From his old master he inherited the subdued tones of his early painting period, and in Whistler's studio he also learned the craft of etching. Of all Sickert's *oeuvre*, the prints must be judged the weakest—the tentative line and even grey tone of so many of his plates seeming to have been produced in emulation of Whistler's delicacy, but without his magic. On the other hand, Sickert's drawings (including his many studies of nude figures on iron bedsteads, and other interiors of his Camden Town period) commonly possess a verve and vitality matched only by the most spirited studies of his Fitzroy Street circle.

But it is to the paintings of this last of the great Impressionists that one returns always. The Whistler influence was never so potent as that of Degas; and it was as his protégé that Sickert acquired his technique and his discipline in France at the end of the century, together with that power of application which drove him all his strenuous life. The foundation of Sickert's art is tone—a devotion to niceties of tone as a means of giving his pictures unity and of placing things in a visually convincing environment. Of this we were made most conscious in the beautiful little collection at Roland, Browse's Gallery which largely concentrated on the artist's early music-hall, Dieppe, and Venetian paintings. Two canal scenes bought from France reinforced the Venetian representation, paintings whose muted sonority would make a comparable Whistler appear lady-like and slight. The sombre chocolate and khaki accords evoke the Dieppe which Sickert made his own, and inform some early theatre scenes as little known as *La Galté Rochechouart, Paris*, relieved by splotches of gold and puce. It is the painting of a wizard who could sense unerringly the moment to stop and leave unfinished a surprising blue and brown underpainting, and who can suggest the luxury of a full chromatic range in an almost monochromatic *Self-portrait with blind Fiddler*.

After the First World War Sickert's palette had much lightened, and around 1927 he embarked on a series of nostalgic *Echoes*. These free adaptations of prints and engravings after his old favourites, such as Cruikshank and Gilbert—transposed to a large scale—may not be among his major achievements, but they illumine his well-stored mind. In addition, during this time, Sickert was painting all manner of glimpses of the front at Hove and elsewhere, remarkable for the immediacy of their impression, before he moved finally to Bath, his fireworks still unspent.

In 1941, only some months before Sickert's death, the National Gallery arranged a large one-man exhibition of his paintings and drawings which was visited by over thirty thousand people headed by the Queen, herself a lender. It was a homage, which will be resumed at the Tate Gallery this May, to a great painter who continued to develop, reminding us now of his ties with France, now again of Tintoretto in the deep wine red, metallic green and silver of *The Raising of Lazarus*: a painter whose gusto and variety have combined with genius to transcend that period in which he lived and so gaily swaggered.

NEVILLE WALLIS

DEFOE TRICENTENARY EXHIBITION

An exhibition commemorating the birth, three hundred years ago, of Daniel Defoe, will be held at the Stoke Newington Public Library, Stoke Newington Church Street, N.16, from 7th to 28th May. The display will include books and pamphlets by Defoe (some of the former in different editions) and will illustrate incidents, persons and places contemporary with him and having particular reference to Stoke Newington. The hours of viewing will be from 2 to 8 p.m. daily, Sundays excepted.

In the course of the opening ceremony, at 3 p.m. on 7th May, an address entitled 'Defoe in Stoke Newington' will be delivered by Professor John Robert Moore of Indiana University. (See also this Society's meeting on 27th April, p. 385 above.)

LITTER BIN COMPETITION

The Council of Industrial Design, in association with the Ministry of Housing and Local Government and the Department of Health for Scotland, is to hold a Litter Bin Competition, for which manufacturers are now invited to submit designs. The object of the competition is to meet the demand for litter bins created by the Litter Act, 1958, and to stimulate the production of inexpensive, well-designed bins for both streets and public open spaces.

The competition, which will be judged by the C.o.I.D.'s Street Furniture Panel, is limited to *bona fide* manufacturers who are willing and able to execute orders to the designs submitted. These must be in prototype form, or pre-production samples, and accompanied by a short explanatory report. Full details and entry forms should be obtained from Mr. Peter Whitworth, Council of Industrial Design Street Furniture Panel, 28 Haymarket, London, S.W.1. The closing date for the receipt of applications is 1st June, 1960.

STUDENTSHIP FOR RESEARCH INTO TRANSPORT

Applications are invited for a Rees-Jeffreys Studentship, tenable at the London School of Economics, to enable a suitable candidate to devote at least one whole year to full-time research into the Economics of Transport. The Studentship is not confined to university graduates, but is also open to any person who has been engaged in the administration of transport, including road transport, or in the production of transport equipment or facilities. The value of the award is £500, and it will be tenable from 1st October, 1960.

The closing date for the receipt of applications is 1st September. Full particulars and application forms should be obtained from the Registrar at the London School of Economics and Political Science, Houghton Street, Aldwych, W.C.2.

BRITISH ELECTRONIC ENGINEERING: ANNUAL REVIEW, 1959

The British Electronic Engineering Association has published a review of its member-companies' achievements and activities during 1959 which may be obtained, free of charge, by Fellows of this Society who are interested. The Electronics Industry is growing at an estimated rate of £30 million a year, and its export of capital goods is increasing at a comparable rate. The review, which is extensively illustrated, describes the progress made in a wide range of applications on land and sea, in the air, in factories, atomic plants, television and sound broadcasting, and computers.

Copies of this publication may be had from the British Electronic Engineering Association at 11 Green Street, London, W.1.

STUDIES IN THE SOCIETY'S ARCHIVES XI

DR. PETER TEMPLEMAN AND HIS APPOINTMENT AS SECRETARY
OF THE SOCIETY IN 1760 (i)

Some account of Dr. Peter Templeman, first Secretary of the Society, was given by Sir Henry Trueman Wood in his *History of the Royal Society of Arts*,¹ and (as Sir Henry remarked) a good account is also to be found in the *Dictionary of National Biography*.²

Both these notices draw on a much more complete sketch of Templeman's life and character by John Nichols, the Printer. Nichols when young may have met Templeman himself, but he had much of his information from William Cuming, the doctor of Dorchester, who was 'intimately acquainted with Peter Templeman from the year 1741 until the time of his death in 1769'.³

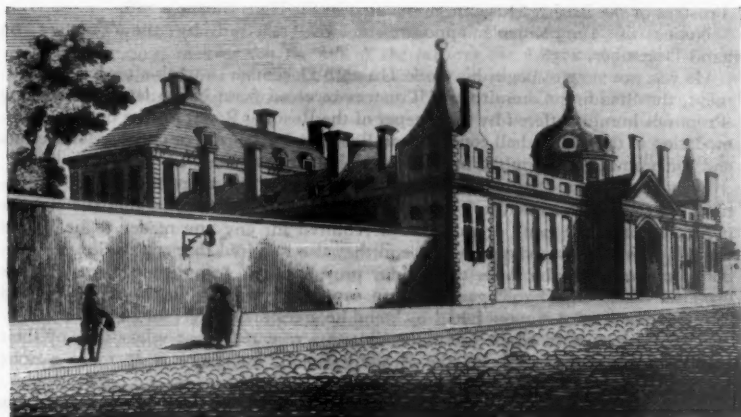
As will shortly be seen, the author of this present note has also drawn largely on Nichols' account as well as on other sources. For such details as are new he is indebted

to the facilities given him to read the early Minutes of the meetings of the Trustees of the British Museum, the early records of the Society of Arts, the parish registers of St. Martin-in-the-Fields, and to consult books in the libraries of the British Museum, the Society of Antiquaries, and the Medical Society of London.

Peter Templeman, who was born in Dorchester on 11th March, 1711, was at the Charterhouse under Dr. Thomas Walker and, at 16, went up to Trinity College, Cambridge, where at first he read for Holy orders. At some time during his years at Cambridge he decided to study medicine, and in June 1735, he, like so many other medical men in his day, went to Leyden to attend the lectures given by the celebrated professor, Hermann Boerhaave.

In a letter preserved in the British Museum⁴ there is a lively account by Templeman of his voyage to Holland and his journey to Leyden. His first impressions of the country moved him to write almost rapturously of the cleanliness and beauty of the cities and of the 'Summer Seats and Gardens' by the canals on which he travelled.

Contemporaries of Templeman at Leyden were two men who came more fully into his life in later years. One was William Cuming, referred to above, a medical student at Edinburgh with Dr. John Fothergill, and his lifelong friend; the other was Matthew Maty, who had entered Leyden in 1732 but remained there until 1740 and came to London in 1741.⁵



*The Great Russell Street front of the British Museum (formerly Montagu House) soon after it was opened to the public in 1759.
(Reproduced by permission of the British Museum Trustees)*

On his return from Leyden Templeman intended to practise as a physician in London, but in this he was never very successful. A contributory cause for this failure may have been the substantial allowance he received from his father; this meant that the young man could afford to follow his own inclination, which lay in other directions, as one sees clearly from a character sketch⁶ of him given by his friend Cuming to Nichols. One cannot do better than quote it again.

He was a man of a very liberal turn of mind, of general erudition, with a large acquaintance among the learned of different professions, but of an indolent,

inactive disposition; he could not enter into juntos with people that were not to his liking; he could not cultivate the acquaintance to be met with at tea-tables; he could not intrigue with nurses, nor associate with the various knots of pert, insipid, well-bred, impertinent, good-humoured, malicious gossips, that are often found so useful to introduce a young physician into practice; but rather chose to employ his time at home in the perusal of an ingenious author or to spend an Attic evening in a select company of men of sense and learning.

Templeman was by no means idle, but there is not space here—nor is this the occasion—to go into details of his publications or of his life among the learned doctors of London. Rather one must go forward nearly twenty years, to 1758, in which year he was appointed to the post of Keeper of the Reading Room of the British Museum, soon to be opened to the public. Nichols does not state who proposed Templeman for this appointment, but it is known he already had acquaintances among the Trustees and knew at least one of the quite recently appointed staff. Matthew Maty, one of his contemporaries at Leyden, had been appointed to the Department of Printed Books, and both he and Templeman were members of a Club, the 'Club of honest Whigs' as Benjamin Franklin called it, which met fortnightly at the Queen's Arms in St. Paul's Churchyard. Another and more senior member of the same club was William (later Sir William) Watson, the botanist, a pioneer in England of many electrical experiments, and one of the original Trustees of the British Museum, nominated in Sir Hans Sloane's will.

Notice of Templeman's appointment was received by the Trustees on 22nd December, 1758.⁷

He was not slow to begin his work. On 29th December, a week after his appointment, the Standing Committee of Trustees received from him a letter⁸ containing 'Proposals humbly offered by the Keeper of the Reading Room for the better accommodation of those that shall come to read Books and to consult or collate Manuscripts and for promoting the public utility of so noble an Institution'.

Early in 1759, on 13th February,⁹ he put forward proposals relating to the regulations for getting out manuscripts and books for readers. It seems that the statutes permitted only one book or manuscript required for any one reader to be lodged in the Reading Room on any one day, and they also required that application for such book or manuscript be made on the day previous. Dr. Templeman in making his proposal states that he 'began and has continued to send for more Books and Manuscripts at once if requested . . .', and he gives his reasons for so doing.

It is not known to what extent the Trustees resented these relaxations of their regulations by the Keeper of the Reading Room, but there were more serious differences to come.

The first trouble was over the Keeper's Apartments. A Minute of the Trustees at a meeting held a week after Dr. Templeman's appointment had decreed 'that the same allowance be made to Dr. Templeman for lodgings as was made to the Assistants till such time as his Apartment is ready for his reception'.¹⁰ Templeman seems to have understood that apartments assigned to him would be such as would accommodate his family, which consisted of his wife and daughter. After a lapse of eight months the Doctor raised the point in a letter presented to the Standing Committee on 10th August, 1759.¹¹ The report reads as follows:

Present: Lord Charles Cavendish, Dr. Birch, Dr. Watson.

Dr. Templeman having delivered in to the Committee a letter to the following purpose, 'That he is informed They have given orders for building Apartments for the late elected officer [*marginal note*: by which he means the new chosen menial servant]. He hopes They will at the same time consider him for that he accepted the post he is honoured with on an assurance given him that he should be provided with very commodious apartments and till they were



The courtyard of the British Museum at the end of the eighteenth century, showing (on the left of the picture) the wing used for the accommodation of the Museum officials. (From the engraving by A. Warren, reproduced by permission of the British Museum Trustees)

finished should be allowed his house rent'. And desired, by Dr. Knight, to have an answer in writing.

The committee notes its Minute of 29th December, 1758 (above mentioned) and that

... Mr. Harper and Dr. Gifford having accepted apartments in the old kitchen [of Montagu House] it was 'Ordered that ... the apartment lately occupied by Mr. Harper¹² be assigned to Dr. Templeman and that Dr. Knight pay to him the sum of Fifteen Pounds in consideration of his expenses for Lodging. And that Dr. Templeman be acquainted that the Committee know of no promise but what is contained in the above order [of 29th December], and that they have no power to erect any new building. That now making for the servant lately chosen being in pursuance of an order and by the direction of the last General Meeting.

This evidently was not at all what the learned Doctor expected, and he renewed his request for better consideration in a letter dated 16th August.¹³ This seems worth quoting in full:

Dr. Templeman sends his Duty to the Committee, and returns thanks for the generous allowance appointed him in consideration of his expenses for lodging.

He begs leave to represent to them that as to the Apartments they have assigned him it is equivalent with assigning him none; for he cannot possibly inhabit them with his family. And they knew, at least many of the Honourable Board knew, before he was elected that he had a family.

As he is not therefore to have apartments in the Museum and no longer anything allowed him in consideration of apartments, the Profits he has made from his Office are greatly diminished and he leaves it to their generosity to consider whether after such lessening of the value of his Place They can

expect an attendance of six hours in a day, to come through all Weathers, and to neglect all other Business.

He hopes it is not impertinent to mention on this occasion that a country curacy of 30 l. value a year which requires attendance twice on the Sunday and the reading of Prayers every day, is thought to be the most wretched preferment that any Gentleman can be disgraced with, yet that is Princely Preferment in comparison with His in his present unhoused condition. For tho' the Clergyman does duty twice on the Sunday, both times do not take up more than three hours, and the Service every day not more than half an hour, and in most country places the sum of 30 l. is equivalent to 50 l. in London.

He hopes that they will favour him with an answer to his Remonstrance, and remains Their most Obedient servant, PETR. TEMPLEMAN.

August 16th, 1759.

It got him no further, however, and a Minute of the Committee on 17th August ordered 'That he be acquainted, that the Committee have no power to make any alterations either in his Apartments, Duty, or Salary but that they will lay his application before the next General Meeting'. A reminder from Dr. Templeman received by the same Committee three months later, 23rd November, brought only the same reply,¹⁴ and the General Meeting on 8th March in the following year 'Ordered that Dr. Templeman be acquainted that the Relief desired . . . cannot be granted him'.¹⁵

Three days later, Templeman put in his application for the post of Secretary of the Society of Arts.

W. CAMPBELL SMITH

(To be continued)

1. Sir Henry Trueman Wood, *A History of the Royal Society of Arts*, London, 1913, pp. 24-25.
2. *Dictionary of National Biography*, Vol. LVI (1898), pp. 53-4.
3. John Nichols, *Literary Anecdotes of the Eighteenth Century*, Vol. II, London, 1812, pp. 299-302.
4. Letter to Mr. Samuel Martin. B.M. Addit. MS. 41354, f.2.
5. *D.N.B.*, Vol. XXXVII (1894), p. 77.
6. Nichols, *Literary Anecdotes*, loc. cit.
7. R. Hingston Fox, *Dr. John Fothergill and his Friends*, London, 1919, p. 317.
8. British Museum, Minutes G.M. 247.
9. B.M., Letter No. 32.
10. B.M., Letter No. 33.
11. B.M., Minutes C. 493.
12. The Revd. Samuel Harper, Assistant Keeper of Printed Books.
13. B.M., Minutes C. 562.
14. B.M., Minutes C. 582.
15. B.M., Minutes G.M. 289.

OBITUARY

We record with regret the deaths of the following Fellows of the Society:

PROFESSOR. E. G. RICHARDSON

Dr. Edward Gick Richardson, B.A., Ph.D., D.Sc., Professor of Acoustics and Reader in Physics in the University of Durham since 1956, died on 31st March, aged 63.

Richardson was educated at the Cooper's Company School and University College, London. After service in the Royal Air Force during the First World War, he was

for a time on the staff of Kilburn Grammar School before his appointment, in 1923, to a lectureship in physics at University College. In 1931 he became a lecturer at King's College, Newcastle. From 1940 to 1942 he was scientific adviser to the mine department of the Admiralty, and for the next three years scientific adviser to the Royal and Marine Aircraft Establishments.

After the war, Richardson spent much time overseas, attending international conferences and lecturing. In 1947 he was visiting professor at the University of Cairo. He was appointed Leverhulme Research Fellow in 1956. His publications included several authoritative works on acoustics and physical science, and he contributed numerous original papers to learned journals. He himself was editor of *Acoustica*. He twice appeared as a lecturer before this Society: in 1946 he delivered two Cantor lectures on 'Supersonic Vibrations and their Applications' (*Journal*, Vol. XCV, p. 90), and in 1956 he read a paper on 'The Science of Musical Instruments' (*Journal*, Vol. CI, p. 56). He was elected a Fellow of the Society in 1945.

MR. BRADFORD WILLIAMS

Mr. Bradford Williams, A.B., M.L.A., who was appointed the Society's Honorary Corresponding Member in Boston last year, died at Westwood, Massachusetts, on 23rd March.

A graduate of Harvard, where he took a master's degree in landscape architecture, Williams was widely recognized as a professional consultant and lecturer in this sphere. He took a close interest in the work of societies devoted to landscape conservation, particularly in his capacity as Corresponding Secretary (since 1926) of the American Society of Landscape Architects, whose journal, *Landscape Architecture*, he edited. He was a supporter of the National Trust in this country, and an honorary member of the R.I.B.A.

Williams was elected a Fellow of this Society in 1953. During his all-too-brief period as Honorary Corresponding Member, he helped to plan, and bring to a successful conclusion, the first Boston dinner of the Society, which was reported in the March issue of the *Journal* (p. 244).

NOTES ON BOOKS

BAROQUE IN ITALY. By James Lees-Milne. London, Batsford, 1959. 35s net

FROM BAROQUE TO ROCOCO. By Nicholas Powell. London, Faber, 1959. 50s net

As a child, the opening of the second movement of the Rachmaninoff second piano concerto gave me poignant moments of emotional outlet. What appeared to be quadruple time was discovered, in reality, to be triple time, and the period of bewilderment would always momentarily open the heavens for my childish heart. 'Egmont' had the same effect, and partly for the same reason. The magicians had deliberately bewildered their devotee by means of an ambiguous geometrical structure, and he was at their mercy for that essential instant of time when the god could appear.

Baroque architecture, too, relies to a great extent upon moments of bewilderment, brought about by such ambiguous geometry as is embodied for instance in the plan of S. Carlo alle Quattro Fontane.

Alas, for the early stages of sophistication; when one sees how the effect is obtained, one has not quite the same feeling for it again; and perhaps the only way back to a new simplicity of reaction is through a humble, sympathetic and realistic study of the total situation in which each piece of architecture was created.

In *Baroque in Italy*, Mr. Lees-Milne takes us along much of this road with scholarship and sensibility, and one notes with pleasure that the points he makes are supported by apt and accessible illustrations. His range includes some sculpture

and painting as well as architecture, and he has penetrating and illuminating things to say about everything he examines.

In an entertaining chapter on 'Baroque' in ancient Greece and Rome, he shows Baroque elements in the Erechtheion and, more convincingly, in the Temple of Venus at Baalbek (he might possibly have added the Temple El Khazna at Petra). This perhaps demonstrates a measure of acceptance of a hypothesis that the 'Baroque' is a natural phase in the development of any art based on relationships of three-dimensional forms. One feels indeed that Mr. Lees-Milne, who has a rare sensitivity, might comfortably have taken this further with profit to his readers, but he subscribes to contemporary caution, and does not risk any 'easy' aesthetic hypotheses. This tends to make his rationalization of the Baroque—the outcome of a revived faith acting on the architectural tradition of ancient Rome—incomplete, because, though he deals with particular influences, there is an avoidance of any attempt to trace the forces inherent in the style itself which drive it inevitably to its conclusion, and upon which particular external influences act as variants. It is indeed this particular aspect of the truth that an artist would make much use of in producing a pointed pastiche of Baroque work, just as the absence from such a pastiche of the kind of scholarship shown in this book would show it to be obviously of this century.

Using a further broad analogy from music: the development of form up to the advent of Wagner involves a gradual increase in the length of time one musical idea can be sustained, a slowing of the pace of structural change inside any one work, a broadening of the basis of its overall geometry. When this pace of structural change harmonizes with the pace natural to drama, we have Wagner, with a kind of consummation. How much farther can one go along this particular path? The Baroque is a late stage upon the road towards a similar impasse in architecture.

Mr. Lees-Milne drops hints, but stops short, and will not be tempted into the upper air. The absence of a defined terminology, which is so painfully obvious in much contemporary writing about the arts, may make such a synthetic approach into an embarrassing task. One nevertheless feels that if at any time Mr. Lees-Milne chose to yield to this kind of temptation his natural clarity of exposition would protect him; and he would again be sure of the interested and sympathetic following which is merited by this present work.

Nicholas Powell's book, *From Baroque to Rococo*, deals with Austrian and German architecture of the period 1580 to 1790. It is copiously illustrated with photographs. The text reads rather like a guide book, and consists of a mass of classified but otherwise tenuously related facts. Here, one feels, is part of the basic material for some monumental work on German and Austrian Baroque and Rococo, without the book having been written. Students of the period may no doubt use this as a reference book, but the ordinary reader will do well to work back from the photographs, via the indexes (there are several), to the text. He may find himself, however, only occasionally satisfied, and may well continue to wish to know more about the antecedents of, for instance, the Stiftskirche Spital am Pyhrn, with what once must have been a weightless architecture dissolving into glory, the fantastically inept Schloss Plumenau, or the abundant but starved decoration of the porcelain cabinet of the Residenz Ansbach, which withers so dustily back into too simple a basic architectural structure.

RICHARD HILEY

MODERN PUBLICITY, 1959-60. Edited by Wilfrid Walter. London, Studio Publications, 1959. 45s net

In the foreword to *Modern Publicity*, the editor points out that although more than 12,000 entries were received for selection there are not so many reproductions as in past years, 'due', he says, 'to the larger size of individual reproductions—there are many whole page pictures in colour and in black and white'. While there are ten

whole pages in full colour, three in black and one colour, and twenty-two in black and white, there are very many examples far too small in size; so small indeed that the copy is indecipherable. Two examples of such minute reproduction appear on page 85, advertisements for John Hall & Sons (Bristol and London) Ltd., and the Dreyfus Company of the United States. On six pages the blocks are so disposed that the page numbers have been crowded off, namely 79, 81, 89, 139, 144 and 145. The editor, after observing that designers are eagerly using new materials and processing techniques and that 'greater co-operation and understanding exists between designers and clients', says, 'Unhappily the diseases of dullness, cheap presentation and general lack of taste lead to a possible flop in sales of a product'. Well, yes—but why *unhappily*? Isn't it a good thing when advertisers realize that dull, bad advertisements are no help to their sales?

The book has nine sections of illustrations covering posters, press advertising, direct mail, packaging, show cards, labels, trade marks, record sleeves, and calendars. The standard of material is not up to that included in earlier issues of this annual, though it is elevated by excellent work from a few British advertising agencies, from Japan, and South America. The entries from Europe are disappointing and some of them look rather old-fashioned. Why, for example, is Hungary represented by a calendar reproducing an indifferent painting by Aurel Bernath, dated 1928, which is in the Hungarian National Gallery? But there are three outstanding exceptions, all from countries behind the iron curtain: the posters by Ludvik Schindler, from Czechoslovakia (page 45), and Professor Molnar Iosif, from Rumania (page 49), and the Polish poster for the Józef Mroczak Opera House (page 59). By far the most distinguished poster is from Japan, advertising Beppu City (page 26); another, also from Japan, issued for the Kanegafuchi Spinning Co. Ltd., has a strong suggestion of Salvador Dali about it (page 39); while the B.E.A. poster advertising flights to Paris is vigorous and original in conception (page 47).

The section on press advertising is small and uninspired. It is redeemed by one or two advertisements, like the 'Man and Tree' for Fisons' products (page 94), and 'Advice to a Lovelorn Engineer' for Martin Orlando (page 103). The direct mail section is dull; and the packaging section is saved from dullness only by such examples as the pack for rust oil for A. B. Ferryl, Malmö (page 139) and that for Martini & Rossi (page 143). Possibly the most interesting page in the book is 153, which reproduces in colour nine record sleeves from America, France, England and Japan. Perhaps the most depressing conclusion forced on those who study the pages is the decline of power and originality in the designs which have been chosen to represent Germany and the Scandinavian countries.

JOHN GLOAG

FROM THE JOURNAL OF 1860

VOLUME VIII. 4th May

INTERNATIONAL EXHIBITION OF 1862

The following letter has been addressed to the Secretary of the Society of Arts, by command of His Royal Highness the Prince Consort, President of the Society, expressing the readiness of His Royal Highness to place his name on the List of Guarantors for the sum of £10,000, so soon as the sum of £240,000 has been subscribed:

Windsor Castle, 9th April, 1860.

Dear Sir,—I am commanded by His Royal Highness the Prince Consort to inform you that His Royal Highness has given his best attention to the proposal made by the Council of the Society of Arts for the formation of a Guarantee Fund, in order

to enable them to give effect to the wish of the Society to hold another Great International Exhibition in 1862.

As President of the Society, it is ever the wish of His Royal Highness to assist, as far as it is in his power to do so, any well considered plan, proposed by the Society, which has for its object the advancement of Art and Science as applied to industrial pursuits. But feeling at the same time that the favour of the public to any such plan should be due to the merits of the proposal alone, he has in general made it a rule to decline giving his name to any undertaking which had not already received such an amount of public support as would ensure its ultimate success.

In the present case, however, considering the conditions under which it is proposed to raise the Guarantee Fund—one of which provides that 'no liability shall be incurred by any person subscribing the Agreement, unless the sum of £250,000 be subscribed within six calendar months'—His Royal Highness will so far depart from his ordinary practice as to intimate his readiness, when the public interest in the proposed Exhibition shall have manifested itself to the extent of subscribing £240,000, to contribute the further sum that shall be necessary to complete the full amount of the proposed guarantee.

I remain, dear sir,
Yours very faithfully,
C. GREY

11th May

VISIT OF HER MAJESTY THE QUEEN
AND H.R.H. THE PRINCE CONSORT

Her Majesty the Queen, and His Royal Highness the Prince Consort, President of the Society of Arts, accompanied by the Princesses Alice, Helena, and Louise, visited the Society's House on Tuesday last, and inspected the collection of the works of the late Sir William Ross, R.A. In attendance were the Duchess of Atholl, the Hon. Beatrice Byng, Lord Charles Fitzroy, and Lieut.-Colonel Ponsonby.

Her Majesty was received by Sir Thomas Phillips, Chairman, and the following Members of the Council: Mr. C. Wentworth Dilke and Mr. Henry Thomas Hope, Vice-Presidents; Mr. John Bell, Mr. Peter Graham, Mr. W. Hawes, Colonel H. Cunliffe Owen, R.E., C.B., and Mr. Samuel Redgrave.

[Sir William Ross (1794-1860), was a noted miniature painter. The Queen and most members of the Royal family had sat to him.]

Some Activities of Other Societies and Organizations

MEETINGS

THURS. 28 APR. Commonwealth Society, Royal, Northumberland Avenue, W.C.2. 1.15 p.m. Sir John Macpherson: *Colonialism and the Commonwealth*.

Interplanetary Society, British, at Church House, S.W.1. 7 p.m. Dr. E. W. Still: *High altitude chambers and pressure suits*.

MON. 2 MAY. Engineers, Society of, Burlington House, W.1. 5 p.m. C. E. Tharratt: *Problems in the launching of Black Knight*.

Geographical Society, Royal, 1 Kensington Gore, S.W.7. Sir Olaf Caroe: *The geography and peoples of the Himalayan and Karakoram frontiers*.

TUES. 3 MAY. Plant Engineers, Institution of, at Royal Society of Arts. 6.30 p.m. A. W. F. Abbott: *Oil refinery utilization of heavy constructional machinery*.

WED. 4 MAY. British Academy, Burlington Gardens, W.1. 5 p.m. Sir Mortimer Wheeler: *The 1958 excavations at Charsada, N.W. Frontier, Pakistan*.

Engineers, Junior Institution of, at James Watt Memorial Institute, Great Charles Street, Birmingham. 7 p.m. Professor J. M. Kay: *The engineer's role in nuclear power*.

Mechanical Engineers, Institution of, 1 Birdcage Walk, S.W.1. 6 p.m. Dr. Ekhart Schmidt: *The high-speed heavy-duty diesel engine: its development, design and application*.

Petroleum, Institute of, 81 New Cavendish Street, W.1. 5.30 p.m. F. C. Thomas: *The stabilisation of crude oil*.

THURS. 5 MAY. Anthropological Institute, Royal, 21 Bedford Square, W.C.1. 5.30 p.m. Dr. D. F. B. Roberts: *Studies of growth and physique in some African populations*.

Chemical Society, Burlington House, W.1. 7.30 p.m. Professor A. Butenandt: *Adolf Windaus Memorial Lecture*.

Commonwealth Society, Royal, Northumberland Avenue, W.C.2. 1.15 p.m. Earl De La Warr: *News out of Africa*.

University of London, Senate House, W.C.1. 5.30 p.m. Professor J. R. Sutherland: *Daniel Defoe*.

TUES. 24 MAY. Mechanical Engineers, Institution of, 1 Birdcage Walk, S.W.1. 6.30 p.m. B. A. Luff: *Lotus, the design and development*.

